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Research Article

Factors Affecting Green Product Consumption Behavior in Batangas City, Philippines

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About Article

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ABSTRACT

This study examined the factors influencing green product consumption behavior among working individuals in Batangas City. Specifically, it aimed to identify the respondents' demographic profile and evaluate how environmental knowledge, ethics, social responsibility, and self-responsibility affect their purchasing behavior. A total of 210 working individuals participated in the study. Data were gathered through survey questionnaires and analyzed using frequency/percentage distribution, weighted mean, one-way ANOVA, and independent t-test. The majority of respondents were aged 25–34, female, married, held a bachelor's degree, earned Php 10,001 to Php 20,000 monthly, and worked in the service and sales sector. The results indicated that respondents agreed that the mentioned environmental factors significantly influence their green product consumption behavior. Additionally, the study assessed whether there were significant differences in perceptions when grouped by demographic characteristics. Based on the findings, the researchers proposed an audio-visual campaign to promote green product consumption. The campaign will feature symbols of hazardous and eco-friendly products and emphasize the benefits of environmentally friendly purchasing choices. It is intended to be launched in selected locations in Batangas City to raise public awareness and encourage responsible consumer behavior. The researchers hope this initiative will contribute to increased knowledge and influence the adoption of sustainable consumption practices.

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1. INTRODUCTION

During the late 1980s to early 1990s, the word green was coined for marketing, and it became quite fashionable because it also comes with the environmental awakening of consumers (Tseng & Hung, 2013). Up until now the interest in corporate environmental strategies shifts from cleaner processes to holistic nature-friendly green products (Sdrolia & Zarotiadis, 2019).

As the initiatives and environmental engagement increased, green products entered the market and grew and increased in number. This resulted in an increasing value and share of the green economy in America's economy during 2019 which comprise about 7% of their Gross Domestic Products or about 1.4 U. S Dollars. While according to the "Sustainable Market Share Index" from New York University STERN Center for Sustainable Business authored by Sacco and Whelan (2022), Products marketed as sustainable now hold a 17.0% market share, which provides an increase of 3.3 since 2015, with significant growth during the pandemic.

Despite having different movements and initiatives, the green economy is one of the sectors being neglected in the Philippines. The country ranked 105th among 160 nations globally in the 2022 US consultancy firm Dual Citizen LLC's Global Green Index (GGEI). For that, the study of consumer behavior and the factors affecting this is essential as the consumption habits of the individual significantly contribute to environmental deterioration. Therefore, the researchers seek to know the factors affecting green consumption behavior in Batangas City.

1.1. Objectives

This study was undertaken to find out the factors affecting the green product consumption behavior of working individuals in Batangas City in determining their demographic profile in terms of age, sex, civil status, educational attainment, monthly income; and occupation. The study also aims to determine how these factors influence consumer behavior. The researchers of this study seek to provide an output that can help the people become more knowledgeable about green products.

2. METHODOLOGY

The researchers used the descriptive method of research in conducting the study because it focused on the respondent's green product consumption behavior in Batangas City. Before the actual survey, there was a pilot testing to 30 working individuals in Lipa, Batangas. This was validated by the statistician and grammarian.

The respondents of the study were 210 working individuals. The survey questionnaire are divided into two parts which tackled the respondents' profile and the factors affecting their green product consumption behavior. In order to have substantial and relevant results, the researcher used random sampling. The researchers considered an interval and 5 different points (worship, mall, public market, fast food establishments, government establishments and public places).

In the actual survey, the researchers stay on a point or place they have picked for that day for a certain hour resulting from random picking. In terms of disqualification of the answered questionnaire because of the inadequate answer or sometimes an error in answers, the researchers extend their survey period until they meet the number of respondents required. This questionnaire used a Four (4)-point Likert Scale that has been validated by the statistician. Having 1 as strongly disagree, 2 as disagree, 3 means agree, and lastly 4 equivalents to strongly agree.

Table 1. Likert scale

Options	Range	Verbal Interpretation
1	3.50-4.00	Strongly Agree
3	2.50-3.49	Agree
2	1.50-2.49	Disagree
1	1.00-1.49	Strongly Agree

In gathering the data, the researcher started with the formulation of the survey questionnaire with the guidance of the adviser and validated by the experts, and the reliability was measured by the statistician. The survey questionnaires were distributed and collected for interpretation and analysis.

For the statistical treatments of data, the researchers used the Frequency/Percentage. Weighted Mean and ANOVA (one-way analysis of variance).

4. RESULTS AND DISCUSSION

This chapter presents the analysis and interpretation of data gathered through the questionnaire about green product consumption behavior in Batangas City.

Table 2. Distribution of respondents in terms of age

Age	Frequency	Percentage
18 to 30	60	28.57
25 to 34	78	37.14
35 to 44	31	14.76
45 to 54	28	13.33
55 and above	13	6.19
Total	**210**	**100.0**

As seen in Table 2, the age bracket 25-34 got the highest frequency of 78 out which accumulates 37.14 percent of the total and age between 55 and above got the lowest frequency of 13 respondents and the least percentage of 6.19. According to the result, the researchers conclude that the age bracket 25-34 years old are most likely to consume green products. The results of the analysis in their consumption behavior is positively influenced by the different factors.

In the study of Setyawan *et al.* (2018), millennial consumers are a part of the potential market for eco-friendly products that will affect the environmental sustainability and sustainability of the marketing process. Hence, according to Pew Research Center (2011), this age bracket 25 – 34 which are millennials, they are supportive of stricter environmental laws, and likely

to favor environmentally friendly policies such as green energy development and economic incentives for sustainability.

Table 3. Distribution of Respondents in terms of Sex

Sex	Frequency	Percentage
Male	81	38.57
Female	129	61.43
Total	**210**	**100.0**

Table 3 illustrates the frequency of the sex of the respondents, which from all the respondents, majority are female with 129 or 61.43%, while the least falls under the male category comprising 81 or 38.57% of the total number of respondents.

According to data collected it shows that females are more supportive of consuming green products. Women are mostly inclined and engaged to use a green product, and are strongly influence their attitude not only to green consumption behavior but also to others who are involved in green consumption as well. Thus, Zhao *et al.* (2019) proved that women tend to use less carbon, have more positive intentions toward green consumption, and buy green items more frequently.

As per study out by Diamantopoulos *et al.* (2003); Pagiaslis and Krontalis (2014); Rahim *et al.* (2017) the investigation of public green consumption intention and behavior, most studies have suggested that women are more supportive of green consumption, whereas there are also arguments supporting that men perform better in some aspects of environmental behavior, such as environmental knowledge, environmental intention, which raises an interesting topic, gender difference.

Table 4. Distribution of Respondents in terms of Civil Status

Civil Status	Frequency	Percentage
Single	121	57.62
Married	77	36.37
Widowed	10	4.76
Divorce/ Separated	2	0.95
Total	**94**	**100.0**

Among the 210 respondents,121 or 57.62 percent of the distribution are single which gained the highest frequency. On the other hand, only 2 or 0.95 percent of the results are divorced/ separated which has the lowest frequency.

Therefore, the researchers concluded that single people that are more likely to purchase an environmentally friendly products rather than those who are either married or other respondents. They are are willing to spend more and show more interest in conserving the environment. While there are some Divorce/ Separated people that buy green products however, they show less interest and are not that easily influenced. These people are more on the practical side and buy products they only need rather than the environmental effects of the product that they purchase.

In the study of Bachman *et al.* (2012), many of the green product consumers are single with 57% to be specific. Just like in the study of Namazova and Zeynalova (2022), many of the green product consumers are single. Hence, according to some research, when it comes to buying products, singles have more freedom and are easier to choose from. They have a tendency to concentrate and can make decisions about purchases without consulting a spouse or other family members.

Table 5. Distribution of respondents in terms of educational attainment

Educational Attainment	Frequency	Percent
Elementary Graduate	4	1.90
High School Graduate	46	21.90
Some College but not degree	49	23.33
Associates Degree	11	5.24
Bachelor's Degree	90	42.86
Master's Degree	8	3.81
Professional Degree	2	0.95
Doctorate	0	0.00
Total	**210**	**100**

Table 5 shows the frequency distribution in terms of Educational Attainment of the respondents in this study. From the 210 total number of respondents, 90 or 42.86 percent have a bachelor's degree, making it the highest number of participants in the study. Therefore, it can be concluded most of the working individuals participated have a bachelor's degree.

In this study, many of the consumers of green products in Batangas City have Bachelor's degrees. The reason is that they are more knowledgeable in these kinds of products. In the study of Meader (2022), all of the participants in her study believed that those who are more educated about environmental issues and climate change are more likely to buy green products. According Pratrap (2017) the degree of caution a person will use while making purchases increases with education. Pratrap added that people nowadays care when making purchases as they grow more educated. Nonetheless, participants generally claimed that mostly people with greater education would increase consumers' propensity to buy green goods and their preferences might alter.

Table 6. Distribution of respondents in terms of monthly income.

Average Monthly Income	Frequency	Percent
Below Php 10, 000	46	21.90
Php 10,001 to Php 20,000	113	53.81
Php 20,001 to Php 30,000	24	11.43
Php 30,001 to Php 40,000	15	7.14
Php 40,001 to Php 50,000	3	1.43

Php 50,001 to Php 60,000	1	0.48
Php 60,001 to Php 70,000	1	0.48
Php 70,001 and above	7	3.33
Total	**210**	**100**

The result reveal that 53.81 percent or 113 respondents have Php 10,001 to Php 20,000 average monthly income which gained the highest frequency and both the Php 50,001 to Php 60,000 and Php 60,001 to Php 70,000 got the lowest frequency with 0.48 percent or only 1 respondent. By this, the researchers perceived that the respondents have their buying power to avail green products in the market.

According to the Philippine Statistics Authority (PSA), the average monthly wage rate of time-rated workers on full time basis was Php 16,486 during 2020. Wages and Salaries as part of the income of working individuals has an impact in their consumption behavior towards green products. Income has different effects on different environmentally significant behavior and this effect prevails in samples with relatively wide income range (Otto & Neaman, 2015). This means that income has a role in different behavior that may affect the consumption of the respondents or consumers. However, it does not apply for all behaviors. Aside from this, income also affects the expenditures of the respondents which can also be used in assessing the amount of their footprints. This means that income has a strong relationship to total environmental impacts.

Table 7. Distribution of respondents in terms of occupation

Occupation	Frequency	Percent
Managers	8	3.81
Professionals	30	14.29
Technicians and Associate Professionals	15	7.14
Clerical Support Workers	22	10.48
Service and Sales Workers	76	36.19
Skilled Agricultural, Forestry and Fishery Workers	9	4.29
Craft and related trades workers	0	0.00
Plant and Machine Operators and Assemblers	1	0.48
Elementary Occupations	2	0.95
Armed Forces Occupations	1	0.48
Others	46	21.90
Total	**210**	**100**

The table above shows the distribution of respondents in terms of occupation. The results reveal that 76 out of 210 respondents or 36.19 percent are Service and Sales workers with the highest frequency. It was followed by the other professions that are not indicated on the choices with 21.90 percent or 46 out of 210 respondents. While the lowest frequency falls under the Craft and Related Trades Workers with 0 percent or 0 out of 210 respondents.

From this, it can be concluded that many of the working individuals in Batangas City are Service and sales workers. In fact, according to the Philippine Statistic Authority Current Labor Statistics 2017, the Philippines registered 42.109 million in January 2017 wherein the CALABARZON recorded the highest share at 14.30 percent or 5.645 million. From this figure, 57.1 percent are from the service sector. Statistically proven that there is a high probability that the respondents from Batangas City will be a service and sales worker. Occupation is as important as income in assessing the consumption behavior of the consumer. As it may affect the decision of the consumers, the high- ranking occupation means a high level of income which results in a high buying power.

Table 8. Respondents' assessment of their environmental knowledge as one of the factors affecting their green product consumption behavior

Environmental Knowledge	Mean	Interpretation
I am aware that single-use plastic from manufacturing for packaging poses a significant environmental problem.	3.40	Agree
I am aware that one of the main issues in using products is the unnecessary packaging that exacerbates the pollution issue.	3.37	Agree

I am aware that rampant consumption of non-biodegradable products contributes to the environmental pollution.	3.42	Agree
I am knowledgeable about the environmental issues we have because of too much waste from consumption of products.	3.39	Agree
The non-biodegradable packaging of products that are produced by the industries pollutes the soil.	3.30	Agree
I am aware that the exploitation of natural resources in the production of consumer goods is destroying the ozone layer.	3.37	Agree
I am aware about recycling and how it can contribute to lessen the waste coming from packaging that use single-use plastic, and I know that there are existing green products that can help the environment.	3.45	Agree
I know which product packaging to buy that can reduce the amount of waste being produced by its packaging.	3.29	Agree
I am aware that the future deterioration of environment may be caused by continuous use of the single-use plastic as a form of packaging.	3.32	Agree
I know the symbols for environmentally friendly products in packaging.	3.28	Agree
Composite Mean	**3.36**	**Agree**

Table 8 shows the result that the respondents are knowledgeable regarding the issues and practices related to the environment having the composite mean of 3.36 with its verbal interpretation of Agree. Most of the respondents are aware about recycling and how it contributes to lessen the waste coming from packaging that use single- use plastic as well as they know that there are existing green products that can help the environment, having the highest mean of 3.45 and can be interpreted as Agree. While the lowest mean belongs to both the knowledge regarding which product packaging to buy that can reduce the amount of waste being produced and the symbols for environmentally friendly products in packaging with 3.28 mean respectively. Therefore, it can be concluded that the respondents are knowledgeable about the environmental issues and practices but still needs to become more knowledgeable.

In the study of Tan *et al.* (2016), it was mentioned that the consumers really considered themselves "truly ready" as a green consumer if they already had a sufficient ability or resources which includes knowledge. In addition, the study of Lin & Niu, (2017) states that environmental knowledge could cause positive changes in environmental attitude and further affects green consumption and purchasing behavior. Furthermore, consumers with stronger environmental knowledge could more easily present positive green attitudes that can be a source of competition within a market arising from the green consumption behavior (Chen *et al.*, 2015; Law *et al.*, 2017). However, it is proven that environmental knowledge alone was not sufficient to cause significant change in consequent consumer behavior (Lin & Niu,2017).

Table 9. Respondents' assessment of their environmental ethics as one of the factors affecting their green product consumption behavior

Environmental Ethics	**Mean**	**Interpretation**
I avoid buying products that are potentially harmful to the environment.	3.21	Agree
I believe that I am able to protect environment whenever I purchase and use environmentally friendly products.	3.42	Agree
I feel more secured and comfortable every time I consume green products that are made with recyclable materials.	3.39	Agree
One of my priorities in shopping is the products that are made with recyclable materials.	3.20	Agree
To keep the environment safe, I acknowledge more green products in my purchasing decisions.	3.28	Agree
I take into account other living things when purchasing products from the market.	3.20	Agree
I always consider the environment when purchasing products from the market.	3.21	Agree
Environmentally hazardous products don't appeal to me.	3.06	Agree
I advocate buying environmentally friendly products.	3.33	Agree
There is a great feeling of satisfaction whenever I buy eco-friendly products.	3.40	Agree
Composite Mean	**3.27**	**Agree**

According to the result of the gathered data, Environmental Ethics has a composite mean of 3.27 with verbal interpretation Agree. Also, it shows that respondents believe that they are able to protect the environment whenever they purchase and use environmentally friendly products with the highest frequency of 3.42 mean that can be interpreted as Agree. While the lowest frequency is that the respondents do not appeal by the environmentally hazardous products with 3.06 mean and can be interpreted as Agree. These results can conclude that the Environmental ethics of the respondents really has an impact on their green consumption behavior, as they feel that they contribute to environmental protection and feel satisfied whenever they purchase and use environmentally friendly products.

According to the study of Akhtar *et al.* (2020) cited that Environmental ethics is related to the moral and philosophical relationship between the natural environment and the human race. In addition, Durmaz & Cavus (2022) stated that environmental ethics as per its definition affect consumer purchasing behavior positively and significantly and consumers become more environmentally ethical, They are becoming more demanding of the products, institutions, and organizations that use practices that do not harm the environment (Celik *et al.*, 2019).

Table 10. Respondents' assessment of their environmental social responsibility as one of the factors affecting their green product consumption behavior

Environmental Social Responsibility	**Mean**	**Interpretation**
I encourage my family and friends to buy more environmentally friendly products.	3.37	Agree
I feel ethically compelled to purchase eco-friendly goods rather than regular ones.	3.35	Agree
Glad to participate in activities spearheaded by green product brands that aim to protect and improve the quality of the environment.	3.36	Agree
Support businesses by buying their green products that help in minimizing the negative impacts on the environment.	3.37	Agree
We should all try to buy more environmentally friendly products rather than standard ones that are harmful to the earth.	3.50	Strongly Agree
Support green product campaigns on my social media pages.	3.38	Agree
Support environmentally friendly institutions, businesses, and places.	3.44	Agree
We must be responsible and more environmentally aware in buying products in the market.	3.52	Strongly Agree
I share my knowledge regarding green consumption and buying eco-friendly products with others	3.33	Agree
Recommend others to buy more green products instead of the traditional products that is harmful to our environment.	3.40	Agree
Composite Mean	**3.40**	**Agree**

The Table 10 results revealed that the respondents are significantly influenced by environmental social responsibility having a composite mean of 3.40 which is interpreted as agree. It is shown that most of the respondents strongly believed that people must be responsible and more environmentally aware in buying products in the market, having a weighted mean of 3.52. However, there are only a few people that share their knowledge regarding green consumption and buying eco-friendly products with others, having a weighted mean of 3.33. Working individuals in Batangas City agree that Environmental Social Responsibility influences them to buy green products. However, some are not sharing the knowledge they have regarding green consumption and buying eco-friendly products with others. According to the respondents of this study, some show a lack of interest and find it hard to discover these kinds of environmentally friendly products because there are a lot of alternative products existing in the market that are much cheaper and easier to find than green products.

According to Adobo Magazine (2022), 92% of millennial and Gen Z groups being the majority are now preferring products that are made from natural ingredients. Yet, according to Kantar World (2021), because alternatives were either difficult to find or more expensive, more than half of Filipinos said it was difficult to try these green products. Notwithstanding these obstacles, many Filipinos claimed to have noticed a shift in friends' and families'. Working Individuals in Batangas City added that people also noticed a big change from products being available to different stores in the province to product consumption.

Table 11. Respondents' assessment of their environmental self-responsibility as one of the factors affecting their green product consumption behavior

Environmental Self-Responsibility	Mean	Interpretation
Always consider environmental issues when purchasing goods.	3.27	Agree
Changed my product consumption behavior for ecological reasons.	3.18	Agree
I have a responsibility to protect the environment.	3.52	Strongly Agree
Always opt to purchase eco-friendly goods over standard ones.	3.26	Agree
Purchase more green products in the future that can help the environment.	3.41	Agree
Regulate myself for consuming and buying products that are not eco-friendly.	3.27	Agree
I stopped consuming goods that are packaged with toxic materials.	3.26	Agree
I'm willing to pay a little bit more for environmentally friendly goods because I know they'll be better for the environment.	3.29	Agree
I feel that I am supporting environmental conservation practices whenever I purchase eco-friendly products.	3.42	Agree
I always think twice whenever I buy products that seem to provide negative effects on the environment.	3.41	Agree
Composite Mean	**3.33**	**Agree**

It can be seen in Table 11 that the respondents have an awareness of their self- responsibility on the environment having the composite mean of 3.33 with its verbal interpretation of Agree. According to the result of the data respondents are mostly aware of believing in having a responsibility to protect the environment with the highest weighted mean result of 3.52. On the contrary, there are some respondents who agrees they had changed their product consumption behavior for ecological reasons with the weighted mean of 3.18.

In the study of Steve Cohen (2021) that it is the responsibility of individuals to consider their influence on the environment and, if feasible, reduce the harm they do to the earth. In addition, Davis *et al.* (2011) stated that individuals who are very satisfied with and invested in the environment are more likely to be highly committed to the environment, which further motivates them to adopt environmentally friendly behaviors. Therefore, Terrier and Marfaing (2015) justify that being committed to the environment tends to improve individuals' opinions of themselves, inspiring them to lead environmentally friendly individuals. As a result, an individual's devotion to the environment has a big impact on whether they make environmentally friendly purchases.

Table 12. Consumption behavior of the working individuals in batangas city when grouped according to their age

Factors	f-value	p-value	Decision on Ho	Verbal Interpretation
Environmental Knowledge	1.647	0.164	Accept	No Significant Differences
Environmental Ethics	2.693	0.032	Reject	Significant Differences
Environmental Social Responsibility	3.304	0.012	Reject	Significant Differences
Self-Responsibility	2.733	0.030	Reject	Significant Differences

Environmental Knowledge has shown an f-value of 1.647, and a p-value of 0.164. It is interpreted as having no significant differences when it comes to the consumer's age, and only variable that accepts the null hypothesis of this study. This means that the researchers are confident that it is indeed that age and Environmental Knowledge have no significant differences in the factors that influence green product consumption behavior of the working individuals in Batangas.

Based on the result, Environmental Ethics got a 2.693 computed f-value with a p- value of 0.032 which resulted in rejecting the null hypothesis of the study. While, Environmental Social Responsibility obtained a 3.304 f-value and 0.012 p-value, and Environmental Self obtained a computed f-value of 2.733 and 0.030 p-value. This sense that Environmental Ethics, Environmental Social Responsibility, and Environmental Self-Responsibility have a significant difference in the factors that influence green product consumption behavior when grouped according to age.

According to Suki (2016) found a similar outcome, with individuals who were highly skeptical about having a comparatively low level of environmental concern and mental understanding. As a result, environmental knowledge is essential for influencing consumer behavior and attitudes toward the environment. However, other significant factors have a significant impact on consumer attitudes toward the environment and green purchase habits.

Thus, from the findings of Lin and Niu's (2018) study provide evidence that environmental attitudes and individual attitudes can be positively influenced by environmental knowledge, environmental consciousness, social norms, and well- being. The customers' well-being was significantly impacted by social norms and environmental knowledge, even though environmental knowledge did not significantly affect it. The consumer's environmental opinions, purchasing intentions, and behavior for buying green items was all highly influenced by their level of well-being.

Table 13. Consumption behavior of the working individuals in batangas city when grouped according to their sex

Factors	Computed t-value	p-value	Decision on Ho	Interpretation
Environmental Knowledge	0.083	0.934	Accept	No Significant Difference
Environmental Ethics	-1.374	0.171	Accept	No Significant Difference
Environmental Social Responsibility	-2.44	0.015	Reject	Significant Difference
Environmental Self-Responsibility	-1.688	0.093	Reject	No Significant Difference

The result of the study shows that Environmetal Knowledge has a computed t-value for is 0.083 and a p-value of 0.934. While, Environmental Ethics got a -1.374 computed t- value with a p-value of 0.171, and Environmental Self Responsibility obtained a computed t-value of -1.688 and 0.093 p-value. Therefore, this indicates that the researchers are certain that Environmental Knowledge, Environmental Ethics, and Environmental Self-Responsibility accepted the null hypothesis which has a significant difference when grouped according to sex.

On the other hand, Environmental Social Responsibility when grouped according to sex was the only variable that results in rejecting the null hypothesis of the study. It has a computed t-value of -2.44 and p-value of 0.015. Meaning that Environmental Social Responsibility has a significant difference in the factors that influence green product consumption behavior of working individuals in Batangas City when grouped according to sex.

According to Bettany (2010), Gender variations have an effect on how consumers evaluate products psychologically, which is something marketers must eventually take into account when developing their marketing tactics. Silva and Pownall (2014) demonstrate that gender has a significant factor influencing behavior when it comes to the consumption of green products. According to Brough *et al.* (2016), women's gender groups are more frequently connected with eco-friendly products, which contributes to the perception that women are more concerned with sustainable consumption than males.

Table 14. Consumption behavior of the working individuals in batangas city when grouped according to their civil status

Factors	Computed f-value	p-value	Decision on Ho	Interpretation
Environmental Knowledge	1.461	0.226	Accept	No Significant Difference
Environmental Ethics	0.868	0.475	Accept	No Significant Difference
Environmental Social Responsibility	0.700	0.541	Accept	No Significant Difference
Environmental Self-Responsibility	0.520	0.650	Accept	No Significant Difference

The results reveal same interpretation in consumption behavior of the working individuals in Batangas City when grouped according to their civil status. Environmental Knowledge has an f- value of 1.461 and p-value as 0.226. Environmental Ethics has an f-value of 0.868 and p-value of 0.475. Hence, Environmental social responsibility has a fp-value of 0.700 and p-value of 0.541. Lastly, Environmental Self- Responsibility has a f-value of 0.520 and an f-value of 0.650. From these results it is seen that all the variable accepted the null hypothesis. Therefore, it indicates that the researchers are certain that all the variables have no significant difference in consumption behavior of the working individuals in Batangas City when grouped according to their civil status.

The result was supported the study stated by Zeynalova and Namazova (2022) that the civil status of individuals does not affect consuming environmentally friendly, as long as they are aware of our environment that consuming those green products can help the growth of our community and environment.

Table 15. Consumption behavior of the working individuals in batangas city when grouped according to their educational attainment

Factors	Computed f-value	p-value	Decision on Ho	Interpretation
Environment Knowledge	2.141	0.049	Reject	Significant Difference
Environmental Ethics	0.723	0.632	Accept	No Significant Difference
Environmental Social Responsibility	0.735	0.622	Accept	No Significant Difference
Environmental Self-Responsibility	0.222	0.969	Accept	No Significant Difference

The table 15 shows that Environmental Ethic has an f-value of 0.723 and a p-value of 0.632. Environmental Social Responsibility with a 0.735 f-vale, and 0.622 p-value. Thus, Environmental Self-Responsibility with a p-value of 0.969 and an f-value of 0.222. This results in accepting the null hypothesis which interpreted as no significant difference While, Environmental Knowledge is the only factor that rejects the null hypothesis. It has an f-value of 2.141 and a p- value of 0.049, which can be interpreted as there is a significant difference in consumption behavior of the working individuals in Batangas city when grouped according to their educational attainment.

In the study of Wang *et al.* (2022), they discover evidence that higher levels of pro- environmental attitudes and behavior are connected with higher levels of educational attainment, and these estimates are reliable according to a number of robustness assessments. Meanwhile, Yu *et al.* (2017) found out that if an individual is highly self-responsible in supporting a sustainable environment, purchase intention and consumer loyalty toward green products is heavily influenced by this feeling of responsibility. Hence, Sarma *et al.* (2013) said that education of the consumer can lead to changes in consumption behavior. It is concluded that education is a significant factor to determine the impact of their consumption behavior on green products.

Table 16. Consumption behavior of the working individuals in batangas city when grouped according to their monthly income

Factors	Computed f-value	p-value	Decision on Ho	Interpretation
Environment Knowledge	2.093	0.046	Reject	Significant Difference
Environmental Ethics	0.174	0.990	Accept	No Significant Difference
Environmental Social Responsibility	0.540	0.803	Accept	No Significant Difference
Environmental Self-Responsibility	0.431	0.882	Accept	No Significant Difference

The table shows the assessment of the respondents on the factors affecting their green product consumption when they group according to their monthly income it can conclude that when it comes to environmental knowledge, there is a significant difference on their responses with a f-value of (2.093) and p- value of (0.046). It clearly shows that monthly income affects the level of knowledge of the respondents.

On the other hand, when it comes to environmental ethics with f-value of (0.174) and p-value of (0.990), environmental social responsibility with f-value (0.540) and p-value (0.803) and environmental self-responsibility with f-value (0.431) and p-value (0.882) it shows that there are no significant differences on their responses when they grouped according to their monthly income. Meaning, monthly income does not really affect the Environmental Ethics, Environmental Social Responsibility, and Environmental Self-Responsibility of the respondents.

According to the study of Otto *et al.* (2015), income might also influence the environmental knowledge. Hence, it stated that respondents with a higher income were more knowledgeable about the effects on the environment and the effects of recycling. In addition, the International Journal of Science Education mentioned that generally, research has illustrated that individuals with higher income levels are associated with knowing more about the environment. Thus, for those who earn income through the use of the environment sees it more as a resource, therefore the income really affects the cognitive aspect of the respondents which includes the level of knowledge.

Table 17. Consumption behavior of the working individuals in batangas city when grouped according to their occupation

Factors	Computed f-value	p-value	Decision on Ho	Interpretation
Environment Knowledge	2.596	0.007	Reject	Significant Difference
Environmental Ethics	1.506	0.148	Accept	No Significant Difference
Environmental Social Responsibility	0.837	0.583	Accept	No Significant Difference
Environmental Self Responsibility	0.950	0.483	Accept	No Significant Difference

Table 17 presents the assessment of the respondents on the factors affecting their green product consumption when they grouped according to their occupation. It shows that there is a significant difference in their response in assessing their environmental knowledge when they grouped according to their occupation which comprise a f-value of (2.596) and p-value of (0.007). It clearly states that occupation affects the level of environmental knowledge of the respondents.

On the other hand, environmental ethics with f-value (1.506) and p-value of (0.148), environmental social responsibility with f-value of (0.837) and p-value of (0.583) and environmental self-responsibility with f-value (0.950) and p-value (0.483) shows that there is no significant difference on the response when the respondents grouped according to their occupation. It can conclude that occupation does not affect the respondents' Environmental ethics, environmental social responsibility and environmental self-responsibility.

According to the study of (2022), previous researchers, Gilal, Ashraf, & Channa (2019) and Kim, (2019) discovered that Green Human Resource Management motivates employees to care for

the environment and participate in environmentally-friendly activities. Consequently, the activities and initiatives of different companies where the respondents are working may affect their knowledge when it comes to the environment. It was supported by Cincera and Krajhanzl (2013); Tseng *et al.* (2013) which disclosed that the role of Green Human Resource Management is critical in developing employees' environmental knowledge and motivates them to adopt green behavior while improving organizational environmental performance (Gilal *et al.*, 2019). Based on the studies mentioned, it can clearly conclude that occupation affects the level of environmental knowledge of the respondents especially when their company promotes green actions and activities.

4.1. Proposed output

Figure 1. Proposed output

"Think Green: An Awareness Video Campaign" this output is is a short video campaign that aims to promote greener consumption, provide information regarding the green products, addressing the current environmental problem that we have, educate consumers to be greener when it comes in buying products and to help the consumer to become more aware about the environmental issues that we are facing right now.

Hence, the content was based on the result of the survey done by the researchers. Results that got the lowest result from the survey. This content was decided to help people gain more understanding about green products.

5. CONCLUSION

After the study has been completed, the researcher came up with the following conclusions.

i. Among the 210 respondents, the majority counts 25-34 years old, female, single, with bachelor's degree, works in service and sales, and with a monthly income of Php 10,001-Php 20,000.

ii. The factors affecting the green product consumption behavior as considered by the respondents include environmental knowledge, environmental ethics, environmental social responsibility and environmental self- responsibility.

iii. The respondents' assessment of their environmental knowledge has a significant difference when they are grouped according to educational attainment, monthly income, and occupation. While their assessment of environmental ethics shows that there is a significant difference when they grouped according to their age. Moreover, for the assessment of environmental social responsibility there is a significant difference when the respondents are grouped according to their age and sex. And lastly, the assessment of environmental self-responsibility shows that there is a significant difference when the respondents are grouped according to their age.

iv. The researchers are proposing to create and produce an audio-visual presentation entitled Think Green that will uplift and enhance the knowledge of the consumers when it comes to the green products and their consumption toward those products.

RECOMMENDATIONS

In view of the foregoing results and findings, the researcher came up with the following recommendations:

i. The future researchers may focus on the other group such as students, youth, household members and alike. This is to understand the behavior of the other group other than the working individuals.

ii. The future study may be conducted on the other city or municipality other than the Batangas City. This is also to understand the behavior of other individuals on the other location.

iii. The future researchers may focus on the effects of the specific factor either Environmental Knowledge, Environmental Ethics, Environmental Self- Responsibility and Environmental Social-Responsibility on the buying behavior of the consumer. This is to deeply understand the relationship of the mentioned factors on the green consumption behavior of the individuals.

iv. The future researchers may propose other output that deem necessary in accordance with the result of the study.

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