

# Perceived Knowledge, Attitude, and Practices on Environmentally Responsible Consumerism of Students

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## ABSTRACT

With the rise in population and natural resources diminishing, individuals increasingly need to embrace environmentally responsible consumer practices. This is a cause for concern due to the pervasive influence of consumerism in global societies, leading to substantial environmental impacts. This study aimed to investigate how students perceive knowledge, attitudes, and practices to ensure that logical and statistical methods are employed to answer research questions. The study includes enrolled undergraduate students for academic year 2023-2024 within the age range of 18 to 25 years old to ensure a demographic representation in line with the target population of respondents from different colleges. A survey questionnaire of 302 respondents from 1,200 population of college students were distributed through stratified sampling technique, and the same numbers were retrieved. Likert scales were utilized in the verbal interpretation of results. The methodology involves systematic data analysis using cross-sectional design, enabling researchers to draw meaningful conclusions about the relationship between perceived knowledge, attitude, and practices regarding environmentally responsible consumerism. The findings indicated that students were deeply conscious and held a positive stance towards environmentally responsible consumerism. This confirms the credibility of the proposed theories, demonstrating that students have a solid understanding of the concepts and demonstrate favorable attitudes towards environmentally responsible consumerism. The results also indicate that students demonstrate fair practices in environmentally responsible consumerism, suggesting a moderate implementation of environmentally responsible consumer behavior. The researchers suggest increasing efforts to improve consumer education, as factors may hinder students from embracing environmentally responsible consumer practices.

**Keywords:** Perceived knowledge, attitude, and practices, environmentally responsible consumerism, students

## INTRODUCTION

To gain a more profound comprehension of environmental-conscious consumerism, the central idea explored in this research is that individuals deliberately opt for sustainable and eco-friendly products and services to reduce their adverse environmental impact while concurrently advocating for sustainable practices and development. This concept emphasizes the importance of considering the environmental consequences of one's purchasing decisions and choosing products that are produced and distributed in an environmentally responsible manner.

Several studies have found that students in developing nations, regardless of educational level, have a modest degree of knowledge of environmental challenges while having greater levels of environmental knowledge, highlighting the need for more concentrated research on this area. Consumerism became an international concern when people overspend on unnecessary purchases that caused the environment to suffer greatly. As populations and consumer demands grow, the Earth's natural resources are being depleted at an alarming rate because consumerism has become a dominant force in societies worldwide, resulting in significant environmental consequences (Topić, 2021).

The increasing prevalence of consumerism in Philippine society is evident from the rising percentage of consumer spending and projected to reach 5.5%, compared to last year's figure of 4.8% reflecting Filipino individuals' evolving preferences and aspirations. (Conchada et al., 2023). To address the knowledge gap, there is a need for comprehensive research and analysis to gain insight into the Filipino consumer's mindset and behavior (Castillo, 2018). In the Philippines, a survey revealed that more than two-thirds of respondents expressed their willingness to pay more for goods and services from socially responsible companies.

This research aims to determine the relationship between students' perceived knowledge and attitude and their practices on being environmentally responsible consumers. This study sought to answer the six research questions: What is the level of students' perceived knowledge of environmentally responsible consumerism in terms of food waste and clothing waste? What is the level of students' attitude towards environmentally responsible consumerism in terms of food waste and clothing waste? Is there a significant relationship between perceived knowledge and attitude towards practices on environmentally responsible consumerism? Is there a significant difference in the practices of environmentally responsible consumerism in terms of sex and academic level? Do perceived knowledge and attitude significantly influence students' practices of environmentally responsible consumerism? There are 3 hypotheses in this study. There is no significant relationship between perceived knowledge and attitude toward practices on environmentally responsible consumerism. There is no significant difference in the practices

of environmentally responsible consumerism regarding sex and academic level. Perceived knowledge and attitude do not significantly influence students' environmentally responsible consumerism practices.

This study is significant in understanding the behavior toward the practices of becoming environmentally responsible consumers in the campus where school administration, student council, students, business students, future researchers, and family could benefit on this study.

## LITERATURE REVIEW

In the **perceived knowledge on environmentally responsible consumerism**, many factors, such as the emergence of environmental preservation as a societal imperative and the worldwide preoccupation with green products and sustainable consumption, shape the perception of environmentally responsible consumerism. Understanding environmentally responsible consumerism enables individuals to make informed decisions and actively promote a sustainable future (Amonoy et al. (2021). For the **perceived knowledge on food waste**, it is said that food waste is a major global problem, with an estimated one-third of all food produced for human consumption being wasted yearly (Gustavsson et al., 2011). O'Connor and Mudliar (2021) found that consumers in rural American states were generally aware of food waste and believed that it was a problem. In **perceived knowledge of clothing waste**, a study by Johnson, A., & Bryer, F. (2021) found that students have a good understanding of the environmental impacts of clothing waste.

In the **level of attitude towards Environmentally responsible consumerism**, According to Delieva and Eom (2019), the attitude towards ecologically responsible consumerism pertains to the consumer's comprehensive perception and assessment of environmentally sustainable practices and initiatives. In the **attitude on food waste**, students are a significant contributor to food waste; according to Zhang and Bucci, (2023), they found that the most important factors that led to food waste among university students were lack of organization related to meal planning and shopping, improper food storage, overestimating portion sizes, not liking the food that was prepared, and not having time to eat food before it went bad. The **attitude on clothing waste** are complex and can be influenced by various factors, including environmental knowledge, fashion consciousness, and socioeconomic status. Research has generally found that students have positive attitudes towards reducing clothing waste. A study by Yilanci and Aydin (2020) found that Turkish university students had a high level of knowledge of the environmental impact of clothing waste and were willing to take steps to reduce their waste.

The role of **sex** is substantial in influencing the attitudes, norms, and behaviors concerning environmentally conscious consumption patterns. Research by Smerichevskyi et al. (2018) highlights that women display higher engagement in consuming environmentally friendly products and services than their male counterparts, often taking on leadership roles in decision-making. In **academic Level**, studies indicated that individuals at advanced academic levels exhibit more environmentally responsible consumer practices than those in lower academic grades. Farooq et al. (2019) discovered a higher tendency among college students to recycle and purchase recycled goods than their high school counterparts

In **environmental knowledge model**, it highlights the role of environmental knowledge in influencing consumer behavior Cohen et al., (2007) and Delaney et al., (2004). It suggests that students' level of environmental knowledge, including their understanding of ecological interdependencies, resource conservation, and impact of consumption patterns on the environment, affects willingness to engage in environmentally responsible consumerism.

## **METHODS**

The researchers used a quantitative research approach, and a cross-sectional study design adopted in conducting the Knowledge, Attitude, and Practices (KAP) survey. The population of the study includes enrolled undergraduate students within the age range of 18 to 25 years to ensure a demographic representation in line with the 302 target respondents from 1,200 population of college students during the academic year 2023-1 from the Records and Admission Office of a private university in Cavite which were distributed through stratified sampling technique. The demographic profile of data covers the prevalence of gender, with males comprising 58.28% and females accounting for 41.72%. The breakdown of participants across different academic levels revealed that a majority were sophomores (28.48%), followed by juniors (27.81%), freshmen (23.84%), and seniors (17.88%). The researchers received responses of 302 students from 8 colleges, and the questionnaires were successfully retrieved. Questionnaires from Afroz and Ilham (2020) that were modified utilizing a 5-point Likert scale was used. The pilot study was conducted randomly from the other 30 selected students. The researchers conducted this study by the rules and guidelines of the Ethics Review Board.

## **RESULTS AND DISCUSSION**

Table 1 presents the overall results of student's knowledge of environmentally responsible consumerism.

**Table 1**  
*Perceived Knowledge on Environmentally Responsible Consumerism*

	N	Mean	SD	Verbal Interpretation
Perceived Knowledge	302	3.91	.486	High Knowledge

*1.00-1.49 (No Knowledge), 1.50-2.49 (Low Knowledge), 2.50-3.49 (Moderate Knowledge), 3.50-4.49 (High Knowledge), 4.50-5.00 (Very High Knowledge)*

The result indicates a relatively high level of perceived knowledge among students on environmentally responsible consumerism  $M=3.91$  ( $SD=0.486$ ). This means that students possess a strong grasp of the concept and are inclined to make environmentally mindful consumer decisions.

Table 2 shows the overall results of student’s attitudes towards environmentally responsible consumerism.

**Table 2**  
*Attitude on Environmentally Responsible Consumerism*

	N	Mean	SD	Verbal Interpretation
<b>Attitude</b>	<b>302</b>	<b>3.55</b>	<b>0.418</b>	<b>Good Attitude</b>

*1.00-1.49 (Very Poor Attitude), 1.50-2.49 (Poor Attitude), 2.50-3.49 (Fair Attitude), 3.50-4.49 (Good Attitude), 4.50-5.00 (Very Good Attitude)*

The results show that students generally had a positive attitude towards environmentally responsible consumerism  $M=3.55$  ( $SD=0.418$ ). This indicates that students generally express a favorable outlook toward environmentally conscious consumer behavior. Students are often more willing to embrace sustainable practices once they understand the significance of their contribution to environmental preservation Delieva and Eom (2019).

**In the relationship of knowledge and attitude towards practice on environmentally responsible consumerism,** Table 3 displays the correlation analysis for Perceived Knowledge, Attitude, and Practices. Results show that the practice on environmentally responsible consumerism has a significant correlation with knowledge ( $r = .483, p < .001$ ), and with attitude ( $r = .625, p < .001$ ). Thus, the study successfully rejected the hypothesis that “There is no significant relationship between knowledge and attitude towards practice on being environmentally responsible consumerism.

**Table 3**

*Correlation Matrix of Knowledge and Attitude on Practice towards Environmentally Responsible Consumerism*

	Knowledge ERC	Attitude ERC	Practice ERC
Knowledge ERC			
Attitude ERC	0.599***		
	<.001		
Practice ERC	0.483***	0.625***	
	<.001	<.001	

The correlation coefficient of 0.483 shows that practice and knowledge are moderately positively correlated. This suggests that when one's level of knowledge grows, practice usually improves proportionately. The correlation coefficient of 0.625 between practice and attitude suggests a strong positive relationship between the frequency of practice and the attitude toward the subject or activity being practiced. It implies that the correlation between attitude and practice is high, and indicated a strong association between the variables. According to Yue et al. (2020), influencing environmentally conscious consumer behavior requires a strong commitment to environmental responsibility environmental issues.

In the **significant difference in the practice of environmentally responsible consumerism in terms of sex**, Table 4 displays independent samples T-test comparison of practices between male and female.

**Table 4**

*Independent Samples T-test Comparison of Practices Between Male and Female*

	Group	Descriptives			Statistics			
		N	Mean	SD	t	df	p-value	Interpretation
Practice	Male	176	3.20	.467	-4.65	230	<.001	Significant
	Female	126	3.50	.588				

Note.  $H_a \mu \text{ Male} \neq \mu \text{ Female}$

The results suggest that there is a significant gender difference ( $t = -4.65, p < .001$ ) in the ways that individuals practice environmentally conscious consumption. Since the p-value is less than .001, it can be said that there is a statistically significant difference between the two groups' levels of environmentally responsible consumerism depending on gender. The null

hypothesis, which states that there should be no difference, is thus rejected. This result aligns with the claims that sex affects differences in consumer behavior Smerichevskyi et al. (2018).

These results of the findings of the independent samples t-test, which indicated that gender significantly influenced an individual's decision to engage in environmentally conscious shopping. University students tend to behave more ecologically responsibly than students at lower academic levels (Farooq et al. 2019; Eltayeb et al. 2021).

In the **significant difference in the practice of environmentally responsible consumerism in terms of academic level**, Table 5 exhibits comparison of practice across different academic levels.

**Table 5**  
*Comparison of Practice Across Different Academic Levels, One-Way ANOVA (Fisher's)*

	Academic Level	N	Mean	SD	SE	<b>f</b>	<b>p</b>
Practice	1	72	3.39	.583	0.0687	(3,298) = 1.34	0.263
	2	86	3.23	.465	0.0502		
	3	84	3.33	.572	0.0624		
	4	60	3.36	.535	0.0690		

Results show that there is no significant difference in the practice of environmentally responsible consumerism among students of different year levels,  $F(3, 298) = 1.34, p = .263$ . This suggests that there are no notable distinctions between the four groups. Thus, the null hypothesis of no significant difference in practice considering year level is not rejected.

According to Alamsyah et al. (2020), to encourage changes in consumer behavior toward more environmentally friendly products, it is imperative to increase customer knowledge and Knowledge regarding environmentally sustainable products.

There is no appreciable distinction in educational attainment regarding the practice of environmentally conscious shopping. The study that used Fisher's one-way analysis of variance yielded results that showed no appreciable variation in environmentally conscious consumption between the different academic levels. This means that factors like education level have little bearing on an individual's conduct related to environmental responsibility.

**In the predictors of students' practices on environmentally responsible consumerism**, Table 6 reveals which significant factors and experiences significantly

influence students’ practice of environmentally responsible consumerism through regression analysis. Results have revealed that each of the factors affects each of the practices differently. However, practice as an independent variable positively influences students’ knowledge and attitude.

**Table 6**  
*Model Coefficients for Prediction of Practices on Environmentally Responsible Consumerism*

Predictor	Estimate	SE	t	p	SE	R	R <sup>2</sup>	F	P
Intercept	0.192	0.2233	0.859	0.391		.64	.049	(2,299) = 104	<.001
Knowledge	0.187	0.0617	3.023	0.003	0.168				
Attitude	0.677	0.0716	9.451	<.001	0.525				

A multiple regression analysis was performed to determine whether knowledge and attitude predict the practice of environmentally responsible consumerism. Results indicated that the prediction model is significant,  $F = 104, p < .001, R^2 = .409$ . Knowledge and attitude explained 40.9% of the variance in practice. Furthermore, both knowledge ( $\beta = .187, p = .003$ ) and attitude ( $\beta = .677, p < .001$ ) have positive influence on practice. This implies that as knowledge and attitude increase, the practice of environmentally responsible consumerism improves.

Based on the above **summary of results and discussion**, the research findings have highlighted the valuable insights and backing for existing literature on knowledge, attitude, and practice towards environmentally responsible consumerism. The study revealed that students demonstrate a high level of Knowledge about environmentally responsible consumerism  $M = 3.91$  ( $SD = 0.486$ ). Moreover, the overall attitude of students towards environmentally responsible consumerism appears to be a good attitude  $M = 3.55$  ( $SD = 0.418$ ). Conversely, their practice of environmentally responsible consumerism was fair  $M = 3.32$  ( $SD = .540$ ).

Results, show that students display a high level of Knowledge and comprehension regarding food waste  $M = 4.04$  ( $SD = .642$ ) and clothing waste  $M = 3.79$  ( $SD = .556$ ), recognizing its environmental impact. Furthermore, they exhibit positive attitudes towards food waste  $M = 3.56$  ( $SD = .525$ ) and moderately positive attitudes towards clothing waste  $M = 3.45$  ( $SD = .583$ ). It was also found that there is a positive correlation between knowledge and attitude toward the practice of environmentally responsible consumerism.



Moreover, an examination comparing the variables in students' knowledge, attitude, and practice regarding environmentally responsible consumerism across demographic factors has indicated that sex significantly differs in how individuals engage in environmentally responsible consumerism ( $p = <.001$ ). However, the study found no significant variation in environmentally responsible consumerism across different academic levels ( $p = 0.263$ ). This suggests that factors such as academic level have minimal influence on an individual's behavior related to environmental responsibility.

Finally, of the two independent variables studied, attitude emerges as the strongest predictor of students' engagement in environmentally responsible consumerism. The findings indicate that students possess a high level of knowledge and maintain a positive attitude toward environmentally responsible consumerism.

## **CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS**

In **conclusion**, the study carried out by the researchers effectively demonstrated a direct correlation between students' knowledge, attitude, and practice regarding environmentally responsible consumerism. This reaffirms the significance of education in advocating sustainable actions and proposes that integrating environmental concerns into educational programs can enhance students' sense of environmental accountability. The survey findings show that students with higher levels of understanding of environmental issues and a favorable outlook towards them were more inclined to participate in eco-friendly consumer behaviors.

The findings of the study research indicated that attitude significantly predicts environmentally responsible consumer behavior among students that students are inclined to actively promote environmentally responsible consumerism by increasing their knowledge, fostering positive attitudes, and creating opportunities for practicing such behavior.

This study discussed **implication as follows**:

**In the level of students' perceived knowledge of environmentally responsible consumerism in terms of food waste** the results imply more on understanding the factors influencing food waste behavior and the social and cultural norms shaping food waste practices. For **clothing waste**, it shows that the findings underscore the significance of increasing educational efforts and promoting Knowledge to support students in minimizing their clothing waste. The **level of knowledge on environmentally responsible consumerism** implies that it is essential for universities to prioritize environmental education.

**In the level of students' attitude towards environmentally responsible consumerism in terms of attitude on food waste**, it implies that students who hold intrinsic values concerning environmental conservation and demonstrate behaviors aligned with values are more inclined towards adopting ethical attitudes. **For the clothing waste**, the students

exhibit more favorable attitudes toward minimizing clothing waste. In the **level of attitude on environmentally responsible consumerism**, embracing a positive attitude on environmental consumer behavior involves developing ethical principles in sustainable activities.

**In the relationship of knowledge and attitude towards practice on environmentally responsible consumerism**, it implies that by acting prosocial and pro-environmental, individuals can greatly reduce the harm they cause to the environment.

**For the significant difference in the practices of environmentally responsible consumerism in terms of sex**, indicated that, the result is aligned with the findings of the independent samples t-test, which indicated that gender significantly influenced an individual's decision to engage in environmentally conscious shopping. Higher education levels and affiliation with a college or university also have a significant impact on how consumer behavior is formed. **In terms of academic level**, the changing behavior may require more than just information, which is consistent with the results of the study that indicated environmentally conscious consumerism is not significantly influenced by academic level.

**In the predictors of students' practices on environmentally responsible consumerism**, it is important that promoting participation in environmental protection efforts can enhance individuals' attitudes toward environmentally responsible consumerism.

Based on these results, **suggestion** can be made to motivate students to practice environmentally conscious consumption more effectively such as: *To the School Administration*: Organized workshops, seminars, and training programs that focus on sustainable living practices can provide significant benefits. Practical skills like food management, clothing repair, and composting may be included in these classes. *To the Student Council*: Creating a supportive campus environment that encourages sustainable practices is crucial. This could entail launching eco-friendly initiatives and programs, such as recycling campaigns and community gardens. *To the Students*: Educational institutions may leverage the creativity and passion of students to effect change by offering resources, mentorship, and recognition for student-led initiatives. *To the Business Students*: To assist student-led sustainability projects with funding opportunities, research grants, and academic support to foster creativity and innovation. *To the Future Researchers*: To further study of the related variables that can influence the practice of environmentally responsible consumerism. *To the Family*: Environmental responsibility should begin at home, as families play a crucial role in shaping the attitude and knowledge of students.

**In limitations**, there is no standardized method to determine consumers' knowledge on environmental issues and responsible consumerism. Consumer knowledge is not static and can change over time. Consumer knowledge does not always directly translate into behavior. The study did not cover problems and topics not related to consumerism in the private university. The study solely focused on environmental consumerism on food and clothing waste.

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