

The Influence of Environmental Awareness on Eco-Conscious Purchasing Behavior Among Generation Z Consumers in Kenya: An Empirical Study

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Abstract:- This study investigated the influence of environmental awareness on the eco-conscious purchasing behavior of Generation Z consumers in Kenya. A descriptive research design was employed, and primary data was collected through a Google questionnaire distributed to 102 Generation Z consumers. Descriptive and inferential statistics was used to analyze the data and identify the significant factors influencing green purchase intentions. The study revealed that environmental impact was a key factor in shaping eco-conscious purchasing behavior, with a moderate correlation indicating that environmental considerations accounted for a notable portion of the variance in purchase intentions. Additionally, the research found that cost acted as a barrier to eco-friendly purchasing, suggesting that price perceptions significantly influenced consumer decisions. Awareness of eco-friendly products was also a crucial factor, as it further explained the consumers' purchasing intentions. The findings underscored the importance of environmental impact, cost, and awareness in shaping the eco-conscious purchasing behavior of Generation Z in Kenya. This study contributed to the growing body of literature on consumer behavior and sustainability, offering valuable insights for businesses seeking to promote green products in Kenya. The implications of this research are significant for various stakeholders, including academia, industry, and business practitioners. For academia, the study expanded knowledge on the factors influencing sustainable consumption behaviors, while for industry and businesses, it highlighted the importance of addressing cost concerns and promoting environmental awareness. The study also provided actionable insights for policymakers aiming to encourage sustainable consumption patterns among Kenyan consumers.

I. INTRODUCTION

Environmental awareness had become an increasingly significant factor in shaping consumer behavior worldwide, particularly among younger generations. Generation Z, those born between the late 1990s and early 2010s, were recognized as a demographic group that was particularly attuned to environmental issues and sustainability. This generation grew up in a world where the impacts of climate change, pollution,

and resource depletion were highly visible and often discussed on digital platforms. As a result, their purchasing decisions were increasingly influenced by environmental considerations, with many opting for eco-friendly products and sustainable brands (Tanner & Wölfling Kast, 2022; Mohan, 2021).

In Kenya, the urgency of addressing environmental concerns had been heightened by rapid urbanization, deforestation, and waste management challenges, which sparked a growing interest in sustainable practices across various sectors. Generation Z consumers in Kenya, who were highly digitally connected, were at the forefront of this shift, increasingly demanding products that reflected their values of environmental responsibility (Muriuki, 2023). Recent studies showed that young consumers in Kenya were increasingly willing to make purchasing decisions based on sustainability attributes, such as green packaging, ethical sourcing, and reduced environmental footprints (Ochieng, 2023). However, there was limited empirical research on how environmental awareness directly influenced the eco-conscious purchasing behavior of this specific demographic in the Kenyan market.

This study aimed to fill this gap by exploring the influence of environmental awareness on the purchasing behavior of Generation Z consumers in Kenya. The research sought to understand the extent to which environmental concerns shaped their buying decisions and how these behaviors aligned with or diverged from global trends in sustainable consumption. This research was significant as it provided insights into the motivations driving Generation Z's eco-conscious choices and offered valuable implications for marketers aiming to target this demographic. Furthermore, the findings contributed to a broader understanding of sustainable consumerism in emerging markets and the potential for brands to align their strategies with the values of environmentally aware consumers.

➤ Objectives and Hypothesis

The growing recognition of environmental issues had shifted consumer preferences, particularly among Generation Z (Gen Z), towards more sustainable purchasing decisions. Understanding the factors that drove eco-conscious behavior in this demographic was crucial for marketers, policymakers, and businesses seeking to promote sustainable practices. This

section outlined the objectives of the study and the corresponding hypotheses designed to explore how environmental awareness influenced eco-conscious purchasing behavior among Gen Z consumers in Kenya.

➤ *Objectives of the Study*

The primary objectives of this study were as follows:

- To examine the influence of environmental awareness on the eco-conscious purchasing behavior of Generation Z consumers in Kenya.
- To assess the role of green packaging in shaping the purchasing intentions of Generation Z consumers.
- To explore the impact of cost considerations on the decision-making process for eco-friendly product purchases.
- To evaluate the level of trust Generation Z consumers placed in eco-labels and their effect on product choices.

➤ *The Hypotheses Proposed in the Study were:*

- **H₁:** Environmental awareness positively influenced the eco-conscious purchasing behavior of Generation Z consumers in Kenya.
- **H₂:** Green packaging attributes had a significant impact on the purchasing intentions of Generation Z consumers.
- **H₃:** Cost was a significant barrier to the purchase of eco-friendly products among Generation Z consumers.
- **H₄:** Trust in eco-labels positively influenced the purchase behavior of Generation Z consumers in Kenya.

II. RESEARCH AND METHODOLOGY

This study utilized a descriptive research design to explore the influence of environmental awareness on eco-conscious purchasing behavior among Generation Z consumers in Kenya. This approach facilitated the systematic collection and analysis of data to understand the relationships between variables. Targeting Generation Z, defined as individuals born between 1997 and 2012, the study focused on their significant impact on market trends and concern for environmental sustainability.

A sample of 102 respondents representing a diverse cross-section of this demographic was selected to ensure generalizable findings. Primary data was collected using a Google questionnaire featuring closed-ended and Likert-scale questions to measure environmental awareness and eco-conscious purchasing behavior effectively.

The data was analyzed using SPSS (version 25), employing both descriptive and inferential statistical techniques. Descriptive statistics summarized data through

means, frequencies, and percentages, while inferential statistics, including regression and correlation analysis, quantified the relationship between the variables. This methodology ensured reliable findings, offering valuable insights into the eco-conscious purchasing behavior of Generation Z consumers in Kenya.

III. RESULTS AND DISCUSSION

This section presents the findings of the study, incorporating both descriptive and inferential statistical analyses, including regression analysis, to explore the influence of environmental awareness on eco-conscious purchasing behavior among Generation Z consumers in Kenya. Descriptive statistics provide a summary of respondent demographics and key variables, offering an overview of the study sample and trends in eco-conscious behavior. Inferential statistics, including regression analysis, delve deeper into the relationships between environmental awareness and purchasing behavior, quantifying the strength and significance of these associations. The results are discussed in relation to the research objectives and existing literature, providing valuable insights and implications for stakeholders.

➤ *Demographic Profile of Respondents: Gender, Education, Income, and Age Distribution*

This section provides an overview of the demographic characteristics of the respondents, focusing on key variables such as gender, education, income, and age distribution. Understanding these demographic factors is essential for contextualizing the findings and assessing the representativeness of the sample. These characteristics offer insights into the composition of the Generation Z consumer base in Kenya, helping to interpret their eco-conscious purchasing behavior within the broader socio-economic and educational landscape.

• *Age Distribution of Generation Z Respondents*

This section presents the age distribution of the Generation Z respondents who participated in the study. Understanding the age profile of the respondents is crucial, as it provides insights into the specific sub-groups within Generation Z that may have different levels of engagement with environmental sustainability and eco-conscious purchasing behaviors. Given that Generation Z spans a wide age range, from late teens to early twenties, the analysis of age distribution helps to better understand the nuances in eco-conscious behavior within this demographic. The findings from this distribution contribute to a more targeted understanding of how different age groups within Generation Z approach sustainable consumption.

Table 1 Age Distribution of Generation Z Respondents

		Frequency	Percent
	under 18 years	6	5.9
	18-24 years	82	80.4
	25-30 years	14	13.7
	Total	102	100.0

The age distribution of respondents reveals that 80.4% of participants fall within the 18-24 years age range, making this the dominant group in the sample. This is representative of Generation Z, a cohort known for its high levels of environmental awareness and its increasing influence on consumer behavior, particularly in relation to sustainable products and green packaging (Williams et al., 2021). The dominance of this age group aligns with previous studies that indicate younger consumers are more likely to prioritize environmental sustainability when making purchasing decisions (Bougherara et al., 2020).

A smaller proportion of respondents, 13.7%, fall in the 25-30 years age range, which also shows a growing interest in sustainability, though perhaps less pronounced than in younger consumers (Krause et al., 2019). The 5.9% of respondents under 18 years highlights a limited representation of minors, which might be reflective of parental influence on purchasing decisions in this group, or the fact that individuals under 18 typically have less

purchasing power (Bittner et al., 2020). The results suggest that the key demographic for green packaging and sustainability marketing should focus on Generation Z, given their strong preferences for eco-friendly practices.

• Gender Distribution of Generation Z Respondents

This section outlines the gender distribution of the Generation Z respondents involved in the study. Gender plays an important role in shaping consumer preferences and purchasing behavior, including attitudes towards sustainability and eco-friendly products. By analyzing the gender breakdown, this section aims to highlight any potential differences in how male and female respondents approach environmental awareness and make eco-conscious purchasing decisions. Understanding these differences can provide valuable insights for marketers and businesses seeking to tailor their strategies to appeal to different gender groups within Generation Z.

Table 2 Gender Distribution of Generation Z Respondents

		Frequency	Percent
	Male	45	44.1
	Female	57	55.9
	Total	102	100.0

The gender distribution of the respondents in this study shows that 55.9% of participants are female, while 44.1% are male. This indicates a slightly higher representation of females, which is consistent with other studies that find a higher level of environmental consciousness and sustainable behavior among female consumers (Sharma, 2021; Chen & Chang, 2020). It is widely acknowledged that women tend to show greater concern for environmental issues and are more likely to support products that align with sustainability efforts (Chin et al., 2018).

However, the male respondents also constitute a significant portion of the sample (44.1%), suggesting that green packaging and sustainability-related factors are of interest across genders. Previous research has indicated that both male and female consumers are increasingly considering environmental impact when making purchasing decisions (Yadav & Pathak, 2017), though the emphasis may differ based on specific product categories (Anderson & Duncan,

2020). This gender distribution reflects the broader trend toward eco-conscious consumer behavior, which is no longer predominantly associated with any particular gender.

• Educational Level of Respondents

This section presents the educational level distribution of the Generation Z respondents in the study. Education is a key factor that can influence consumer behavior, particularly in relation to sustainability and eco-conscious purchasing decisions. Respondents' educational background may shape their awareness of environmental issues and their willingness to make environmentally responsible choices. By examining the educational levels of the participants, this section aims to provide insights into whether higher levels of education correlate with increased environmental awareness and more sustainable purchasing behaviors within Generation Z. Understanding these trends is crucial for businesses and policymakers targeting this demographic.

Table 3 Educational Level of Respondents

		Frequency	Percent
	Secondary	10	9.8
	Bachelors	89	87.3
	Masters	3	2.9
	Total	102	100.0

The educational background of the respondents shows a dominant proportion with 87.3% holding a Bachelor's degree, which indicates that the majority of the sample are well-educated individuals, likely with a higher level of awareness regarding environmental and sustainability issues. This aligns with previous studies suggesting that educated individuals are

more likely to engage in sustainable behaviors and be responsive to eco-friendly initiatives (Chin, Poon, & Gan, 2018; Johnson & Jackson, 2020).

A smaller proportion of respondents, 9.8%, reported having completed secondary education, which may limit their access to information regarding sustainable practices and influence their purchasing behaviors (Teng et al., 2020). Only 2.9% of the sample had attained Master's degrees, indicating a relatively small segment of highly educated individuals in this study. This distribution of educational levels provides insights into the potential for targeted marketing strategies. The findings suggest that a large proportion of the target group is likely to be receptive to green packaging initiatives if these messages are framed in an accessible way, accounting for their high educational attainment and awareness (Yadav & Pathak, 2017).

• *Monthly Income of Respondents*

This section explores the monthly income distribution of the Generation Z respondents in the study. Monthly income is an important factor influencing purchasing decisions, particularly when it comes to eco-friendly products, which are often perceived as being more expensive than conventional alternatives. By understanding the income levels of the respondents, this section aims to assess how income may impact their willingness to purchase sustainable products, such as those with green packaging or eco-friendly attributes. The insights gained from this section will help businesses and marketers understand the purchasing power of Generation Z consumers in Kenya and tailor their strategies accordingly.

Table 4 Monthly Income of Respondents

	Frequency	Percent
less than 10,000 KES	67	65.7
10,000-30,000 KES	26	25.5
30,001 - 50,000 KES	5	4.9
50,001 - 100,000KES	3	2.9
Above 100,000 KES	1	1.0
Total	102	100.0

The income distribution of respondents reveals a significant skew towards lower income brackets, with 65.7% of respondents earning less than 10,000 KES monthly. This suggests that a majority of the sample may face financial constraints, which can impact their purchasing power and decision-making behavior regarding eco-friendly products (Barbarossa et al., 2020). A smaller proportion of respondents earn between 10,000 KES and 30,000 KES (25.5%), while even fewer individuals fall into higher income categories, with 4.9% earning 30,001 KES to 50,000 KES, 2.9% earning 50,001 KES to 100,000 KES, and only 1.0% earning more than 100,000 KES.

This income distribution aligns with findings in recent research, which shows that economic factors such as income level can significantly influence consumer behavior, particularly in the context of purchasing sustainable products (Pino et al., 2021). For instance, consumers in lower income brackets may prioritize affordability over sustainability, potentially limiting their engagement with eco-friendly products (Cohen & Kaufman, 2021). These results underscore the importance of considering socio-economic factors in the study of consumer preferences and purchase behavior, particularly when examining sustainable consumption patterns in emerging markets (Barbarossa et al., 2020).

➤ *Descriptive Statistics for Green Packaging Attributes and their Role in Shaping Eco-Conscious Purchases*

This section presents the descriptive statistics for green packaging attributes and their influence on eco-conscious purchasing behavior among Generation Z consumers in Kenya. The analysis explores key packaging features, including recyclability, biodegradability, and sustainability labeling, alongside their perceived importance in shaping purchasing decisions. By summarizing the data, this section provides insights into the prevalence of consumer preferences and attitudes toward green packaging within the target demographic.

• *Descriptive Statistics of Consumer Perceptions of Eco-Friendly Products*

This section presents the descriptive statistics of Generation Z respondents' perceptions of eco-friendly products. Understanding consumer perceptions is essential for evaluating how environmental attributes, such as sustainability and eco-friendliness, influence purchasing decisions. Through descriptive analysis, the study highlights the varying attitudes and perceptions of Generation Z towards eco-friendly products, including their views on green packaging, environmental impact, and brand sustainability. The insights gained from this section will provide a deeper understanding of how this demographic perceives eco-friendly offerings and how these perceptions drive their purchasing behavior.

Table 5 Descriptive Statistics of Consumer Perceptions of Eco-Friendly Products

Descriptive Statistics Consumer Perceptions of Eco- Friendly Products			
	N	Mean	Std. Deviation
I am aware of eco-friendly products	102	3.8824	.93654
Eco-friendly products are better for the environment	102	4.3235	.75991
Cost is a barrier to purchasing eco-friendly products	102	3.9608	.83157
I trust labels indicating that a product is eco-friendly	102	3.2941	.91833

The descriptive statistics for consumer perceptions of eco-friendly products provide key insights into attitudes toward sustainability. The item "I am aware of eco-friendly products" has a mean of 3.88, indicating a moderate awareness level among respondents. This is consistent with prior research that suggests consumers are increasingly aware of environmentally friendly options, but awareness does not always equate to active purchase behavior (Barbarossa et al., 2020).

The perception that eco-friendly products are better for the environment received a high mean of 4.32, indicating strong agreement among consumers that such products have positive environmental benefits. This supports findings by Cohen & Kaufman (2021), who highlighted that the environmental benefit is one of the key drivers for consumers to choose sustainable products.

The statement "Cost is a barrier to purchasing eco-friendly products" had a mean of 3.96, showing that consumers recognize cost as an obstacle, but it is not the most significant barrier. This is consistent with literature suggesting that while consumers show a preference for sustainable products, price sensitivity remains a key challenge (Pino et al., 2021).

The trust in labels indicating that a product is eco-friendly scored 3.29, suggesting a moderate level of trust in

these claims. This reflects the growing skepticism consumers have regarding the authenticity of eco-labels, as discussed by Carmagnola et al. (2022), who noted that consumers often question the credibility of such labels, which can impact their purchasing decisions.

Overall, these results align with recent studies suggesting that while environmental awareness and positive attitudes toward eco-friendly products are evident, factors like cost and trust in product labels still significantly influence purchase decisions (Barbarossa et al., 2020; Cohen & Kaufman, 2021; Carmagnola et al., 2022).

• *Descriptive Statistics for Eco-Conscious Purchase Behavior*

This section explores the descriptive statistics related to eco-conscious purchase behavior among Generation Z respondents, as summarized in Table 6. The analysis focuses on key factors influencing sustainable purchasing decisions, such as environmental awareness, emotional satisfaction, and willingness to pay a premium for eco-friendly products. These insights provide a clearer understanding of the extent to which Generation Z integrates eco-conscious values into their buying habits, highlighting areas of alignment and divergence with global trends in sustainable consumerism.

Table 6 Descriptive Statistics for Eco Conscious Purchase Behaviour

	N	Mean	Std. Deviation
Environmental Impact	102	4.0686	.85896
Health Benefits	102	4.3922	.66238
Cost is a barrier to purchasing eco-friendly products	102	3.9608	.83157
Valid N (listwise)	102		

Table 6 summarizes the descriptive statistics for eco-conscious purchase behavior among Generation Z respondents. The results indicate varying levels of agreement with key factors influencing eco-conscious purchasing. The highest mean score was recorded for Health Benefits ($M = 4.39$, $SD = 0.66$), suggesting that Generation Z respondents strongly perceive eco-friendly products as beneficial to health. This aligns with previous research highlighting health-consciousness as a significant motivator in sustainable consumption (Nguyen & Nguyen, 2022).

Environmental Impact scored a mean of 4.07 ($SD = 0.86$), indicating that respondents recognize the importance of their purchasing decisions in reducing environmental harm. This finding supports studies emphasizing environmental considerations as a critical driver of eco-conscious behavior (Dube et al., 2020). Cost as a barrier to purchasing eco-friendly products received a slightly lower mean score of 3.96 ($SD = 0.83$). While cost is identified as a potential constraint, the relatively high score suggests that respondents acknowledge price as a significant consideration, consistent with the literature highlighting affordability as a challenge in green consumerism (Huang et al., 2021).

These findings reinforce the multifaceted nature of eco-conscious behavior, where health benefits, environmental impact, and cost considerations interplay in shaping purchasing decisions. They provide valuable insights for businesses and policymakers aiming to promote eco-friendly products to Generation Z in Kenya.

➤ *Regression Analysis: Green Packaging Attributes and their Role in Shaping Eco-Conscious Purchases*

This section examines the relationship between green packaging attributes and eco-conscious purchasing behavior among Generation Z consumers in Kenya using regression analysis. The analysis evaluates the extent to which attributes such as recyclability, biodegradability, and sustainability labeling predict eco-conscious purchasing intentions. By quantifying these relationships, this section provides a deeper understanding of the impact of green packaging on consumer behavior.

• *Awareness of Eco-Friendly Products and Green Purchase Intentions*

This section explores the relationship between awareness of eco-friendly products and the green purchase intentions of Generation Z consumers in Kenya. Awareness

plays a crucial role in shaping consumer behavior, as it influences individuals' understanding and attitudes toward sustainable products. By analyzing this relationship, the study aims to highlight the significance of consumer knowledge in driving eco-conscious purchasing decisions. The findings offer valuable insights for businesses and policymakers to design effective strategies that promote green consumption.

The regression analysis in Table 7 examines the influence of awareness of eco-friendly products on green purchase intentions among Generation Z consumers in Kenya. A detailed interpretation of the results is provided below:

Table 7 Regression Analysis Results for Awareness of Eco-Friendly Products and Green Purchase Intentions

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.423 ^a	.179	.171	.47330	.179	21.789	1	100	.000	2.098

ANOVA ^a						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	4.881	1	4.881	21.789	.000 ^b
	Residual	22.402	100	.224		
	Total	27.282	101			

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.238	.201		16.129	.000
	I am aware of eco-friendly products	.235	.050	.423	4.668	.000

a. Dependent Variable: Greenpurchaseintentions
b. Predictors: (Constant), I am aware of eco-friendly products

The Model Summary indicates a moderate positive correlation between the predictor variable ("awareness of eco-friendly products") and the outcome variable ("green purchase intentions"), with an R value of .423. The R² value of .179 suggests that 17.9% of the variance in green purchase intentions is explained by the level of awareness regarding eco-friendly products, implying that awareness plays a meaningful role, though other factors may also contribute to purchasing behavior. The Adjusted R² value of .171 confirms the model's reliability and additionally, the Durbin-Watson statistic of 2.098 indicates no significant autocorrelation in the residuals, supporting the statistical validity of the regression model.

The ANOVA table demonstrates the overall significance of the regression model, with an F-statistic of 21.789 (df = 1, 100) and a p-value < .001, confirming that the predictor variable ("awareness of eco-friendly products") significantly influences the dependent variable ("green purchase intentions"). The Coefficients table provides a detailed look at the predictor's contribution, revealing that the unstandardized coefficient (B = .235) indicates that for every one-unit increase in awareness of eco-friendly products, green purchase intentions increase by .235 units, holding other variables constant. The standardized coefficient (Beta = .423) highlights a strong and positive relationship between awareness and green purchase intentions, while the t-value (t = 4.668, p < .001) demonstrates the statistical significance of the predictor variable. The constant value (B = 3.238) represents the baseline level of green purchase intentions in

the absence of awareness of eco-friendly products, which is also significant (t = 16.129, p < .001).

The findings reveal that awareness of eco-friendly products significantly influences the green purchase intentions of Generation Z consumers in Kenya. Awareness accounts for nearly 18% of the variability in purchasing intentions, emphasizing its critical role in shaping consumer behavior. These results highlight the importance of targeted campaigns and educational programs to increase awareness of eco-friendly products, aligning with sustainability objectives and encouraging responsible consumption. These findings are consistent with prior research that identifies awareness as a key driver of eco-conscious behavior (Nguyen et al., 2020). By enhancing consumer knowledge, businesses and policymakers can create a more favorable environment for sustainable purchasing practices.

• Impact of Perceived Environmental Benefits on Green Purchase Intentions

This section explores the influence of the perception that eco-friendly products provide environmental benefits on green purchase intentions among Generation Z consumers. Understanding how these perceived benefits shape purchasing behavior is crucial for developing effective marketing strategies that promote sustainability. Regression analysis was conducted to determine the extent to which this perception predicts green purchase intentions, with the results presented in Table 8.

Table 8 Regression Analysis Results for the Impact of Perceived Environmental Benefits on Green Purchase Intentions

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.359 ^a	.129	.120	.48753	.129	14.785	1	100	.000	2.234

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.514	1	3.514	14.785	.000 ^b
	Residual	23.768	100	.238		
	Total	27.282	101			

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.088	.280		11.022	.000
	Eco-friendly products are better for the environment	.245	.064	.359	3.845	.000

a. Dependent Variable: Green purchase intentions

b. (Constant). Eco-friendly products are better for the environment

The regression analysis results presented in Table 8 evaluate the influence of the perception that "eco-friendly products are better for the environment" on green purchase intentions among Generation Z consumers in Kenya.

The Model Summary reveals a moderate positive correlation between the predictor variable (perception of eco-friendly products being environmentally beneficial) and the dependent variable (green purchase intentions), with an R-value of .359. The R² value of .129 indicates that 12.9% of the variance in green purchase intentions is explained by the perception that eco-friendly products positively impact the environment. Although this suggests that the perception of environmental benefits contributes meaningfully to green purchase intentions, the remaining variance indicates the potential influence of other factors. The Adjusted R² value of .120 confirms the model's generalizability and reliability and reliability. The Durbin-Watson statistic of 2.234 suggests that there is no significant autocorrelation in the residuals, supporting the validity of the model's assumptions and results.

The ANOVA table confirms the statistical significance of the regression model, with an F-statistic of 14.785 (df = 1, 100) and a p-value of less than .001. This finding indicates that the perception that "eco-friendly products are better for the environment" has a significant impact on green purchase intentions, validating the model's predictive power.

The Coefficients table provides a detailed breakdown of the predictor variable's impact. The unstandardized coefficient (B = .245) implies that for every one-unit increase in the perception that eco-friendly products are environmentally beneficial, green purchase intentions increase by .245 units, holding other factors constant. The standardized coefficient (Beta = .359) further emphasizes the positive and moderately strong relationship between these two variables.

The t-statistic of 3.845 and a highly significant p-value (< .001) confirm that the predictor variable makes a statistically significant contribution to the model. The constant value (B = 3.088) represents the baseline level of green purchase intentions in the absence of the predictor, which is also statistically significant (t = 11.022, p < .001).

These findings underscore the importance of promoting the environmental benefits of eco-friendly products to enhance green purchasing behaviors among Generation Z consumers. By highlighting the ecological advantages of such products, marketers and policymakers can influence consumer perceptions and foster more sustainable consumption patterns. This result aligns with prior studies, such as Nguyen et al. (2020), which demonstrated the critical role of perceived environmental benefits in driving eco-conscious behavior. The perception that eco-friendly products are better for the environment significantly impacts green purchase intentions. The findings emphasize the need for awareness campaigns and targeted messaging strategies that focus on the environmental value of eco-friendly products, aiming to inspire environmentally responsible choices among Generation Z consumers.

• Influence of Cost Barriers on Green Purchase Intention

The perception of cost as a barrier plays a critical role in shaping consumers' green purchase intentions, particularly among Generation Z. Despite an increasing awareness of environmental issues, many potential buyers perceive eco-friendly products as being too expensive, which limits their willingness to adopt sustainable consumption behaviors. This section examines the influence of cost-related barriers on green purchase intentions, providing insights into how these perceptions impact purchasing decisions. The regression analysis presented in Table 9 explores the relationship between the perceived cost barrier and green purchase intentions, highlighting the significance of cost in driving or hindering sustainable purchasing choices.

Table 9 Regression Analysis Results for the Impact of Cost Barriers on Green Purchase Intentions

Table 3. Regression Analysis Results for the Impact of Cost Barriers on Green Purchase Intentions										
Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.357 ^a	.128	.119	.48784	.128	14.637	1	100	.000	2.030

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.484	1	3.484	14.637	.000 ^b
	Residual	23.799	100	.238		
	Total	27.282	101			

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.265	.236		13.823	.000
	Cost is a barrier to purchasing eco-friendly products	.223	.058	.357	3.826	.000

a. Dependent Variable: Greenpurchaseintentions

b. a. Predictors: (Constant), Cost is a barrier to purchasing eco-friendly products

Table 9 indicates, the regression results underscore the significant role that the perception of cost as a barrier plays in shaping the green purchase intentions of Generation Z consumers in Kenya. The positive relationship observed between cost as a perceived barrier and green purchase intentions is noteworthy, as it illustrates the complex nature of consumer decision-making in the context of sustainable consumption. The Model Summary indicates that while the perception of cost explains a moderate portion (12.8%) of the variance in green purchase intentions, other factors likely influence the decision-making process, which are not captured in this model. This suggests that, while cost is a key factor, it is only part of the broader picture. Consumer motivations for purchasing eco-friendly products are likely influenced by a combination of factors, including environmental awareness, product availability, and personal values. The Adjusted R² value further affirms the robustness of the model, showing that the 12.8% variance explained by the model is not overestimated. This is an important consideration, ensuring that the findings accurately reflect the relationship between cost perceptions and purchase intentions.

Additionally, the Durbin-Watson statistic of 2.030, indicating no significant autocorrelation among residuals, further supports the validity of the regression model. This means that the model's predictions are reliable, and the observed relationship between cost barriers and green purchase intentions is not biased due to sequential dependencies in the data. In the ANOVA Table, the F-statistic of 14.637 and the associated p-value < .001 highlight that the regression model is statistically significant. This confirms that the predictor variable, "Cost is a barrier to purchasing eco-friendly products," plays a meaningful role in explaining the variation in green purchase intentions. The strong significance of the model suggests that addressing cost perceptions could be an effective strategy to enhance green purchase behaviors among consumers.

The Coefficients Table provides a detailed view of how the perception of cost influences green purchase intentions. The unstandardized coefficient (B = .223) indicates that for every one-unit increase in the perception of cost as a barrier, green purchase intentions increase by .223 units. This result suggests that, while cost remains a challenge, consumers who perceive higher costs as an obstacle are still more likely to develop green purchase intentions, possibly because they are aware of the benefits of eco-friendly alternatives and may seek out ways to overcome this barrier. The standardized coefficient (Beta = .357) indicates a moderate positive relationship between cost as a barrier and green purchase intentions. This highlights that cost-related perceptions are not just weakly linked to purchasing intentions but have a meaningful impact on how consumers think about sustainable products. The predictor's statistical significance (t = 3.826, p < .001) reinforces that the perception of cost as a barrier is a key determinant in shaping consumers' green purchasing behavior. This emphasizes the need for businesses to address this barrier through strategies like price reductions, promotions, or more affordable sustainable options. The constant (B = 3.265), which represents the baseline level of green purchase intentions in the absence of cost barriers, is also significant (t = 13.823, p < .001). This further supports the idea that there is a general inclination toward green purchasing behavior, even in the absence of cost-related barriers, suggesting that environmental consciousness and other factors might also influence consumers' intentions.

The findings from indicate that while cost perceptions pose a significant barrier, they do not completely deter green purchase intentions. This suggests that Generation Z consumers, in Kenya, remain open to purchasing eco-friendly products, provided that these products are accessible and affordable. The result is consistent with prior studies, such as those by Tan et al. (2021), which show that price sensitivity remains a significant challenge in driving sustainable consumption. To address these barriers and encourage green

purchases, businesses could adopt pricing strategies that reduce the financial burden on consumers, such as offering discounts, subsidies, or introducing lower-priced eco-friendly alternatives. Additionally, improving the visibility of the long-term benefits of eco-friendly products could mitigate the perceived cost barriers, allowing consumers to see the value of these purchases beyond their immediate financial cost.

The perception of cost as a barrier to purchasing eco-friendly products significantly influences the green purchase intentions of Generation Z consumers, explaining 12.8% of the variance in purchase intentions. To encourage sustainable consumption, addressing this barrier through targeted marketing campaigns, promotions, and offering products at more affordable price points is essential. Future research could further explore the combined influence of other factors such as environmental awareness, social norms, and product availability to provide a more comprehensive understanding of the drivers of green purchasing behavior.

• *Effect of Trust in Eco-friendly Labels on Green Purchase Intentions*

As consumer awareness of environmental issues continues to rise, eco-friendly labeling has become a significant factor in influencing green purchase intentions. Trust in eco-friendly labels is often regarded as a key driver of sustainable consumer behavior, as it helps consumers make informed decisions about the environmental impact of the products they purchase. However, the extent to which trust in these labels influences green purchasing behavior remains a subject of debate. This section explores the relationship between trust in eco-friendly labels and consumers' green purchase intentions, offering insights into the effectiveness of such labels in promoting sustainable consumption. Through regression analysis, the section evaluates how trust in eco-labels impacts consumers' intentions to make environmentally conscious purchasing decisions. The results are presented in Table 10.

Table 10 Regression Analysis on the Impact of Trust in Eco-friendly Labels on Green Purchase Intentions

Model Summary ^b										
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.166 ^a	.028	.018	.51506	.028	2.843	1	100	.095	1.904
ANOVA ^a										
Model		Sum of Squares		Df	Mean Square		F	Sig.		
1	Regression		.754	1	.754		2.843	.095 ^b		
	Residual		26.528	100	.265					
	Total		27.282	101						
Coefficients ^a										
Model			Unstandardized Coefficients		Standardized Coefficients		t	Sig.		
			B	Std. Error	Beta					
1	(Constant)		3.840	.191			20.126	.000		
	I trust labels indicating that a product is eco-friendly		.094	.056	.166		1.686	.095		
a. Dependent Variable: Green purchase intentions										
b. Predictors: (Constant), I trust labels indicating that a product is eco-friendly										

The regression analysis in Table 10 presents a model that explores the relationship between consumer trust in eco-friendly labels and their green purchase intentions. The R-value of 0.166 indicates a weak correlation between the predictor (trust in eco-friendly labels) and the outcome (green purchase intentions), highlighting that while there is some relationship between these two variables, it is not strong. This finding aligns with previous research suggesting that factors influencing green purchase intentions are multifaceted and not solely dependent on one variable such as label trust (Chen, 2010; Peattie, 2010).

The R Square value of 0.028 shows that only 2.8% of the variance in green purchase intentions can be explained by trust in eco-friendly labels. This suggests that while eco-labels may influence consumer decisions, they do not serve as the dominant factor in shaping consumers' green purchase intentions. This result is consistent with studies that argue that environmental concerns alone are insufficient to drive

sustainable purchasing behavior, and that other factors such as product quality, price, and convenience also play critical roles (Biswas & Roy, 2015; Johnstone & Tan, 2015).

Further, the Adjusted R Square value of 0.018, which slightly reduces the explanatory power of the model after accounting for the number of predictors, reinforces the conclusion that the inclusion of trust in eco-friendly labels does not substantially enhance the model's ability to predict green purchase intentions. This suggests that, while trust in eco-friendly labels contributes to consumer behavior, its impact is limited. Previous studies have emphasized that environmental motivations alone do not always translate into purchasing decisions, as consumers weigh multiple factors (Schwepker, 2015).

The Standard Error of the Estimate (0.51506) represents the average deviation of observed values from the predicted values in the model, suggesting that a moderate level of

variability remains unexplained. This indicates that other, unmeasured factors may account for the discrepancies in predicting green purchase intentions. Moreover, the Durbin-Watson statistic (1.904) indicates that there is no significant autocorrelation among residuals, which is a positive sign that the model's predictions are unbiased and independent from one another (Tabachnick & Fidell, 2013).

The ANOVA tests the overall significance of the regression model. The F-statistic (2.843) and p-value (0.095) suggest that the model is not statistically significant at the 0.05 level. Therefore, the relationship between trust in eco-friendly labels and green purchase intentions is weak, and the predictor variable does not substantially explain variations in green purchase intentions. This finding supports the notion that other factors, beyond just trust in eco-labels, may influence green purchasing behavior, aligning with past studies that emphasize the complexity of eco-friendly purchasing decisions (Peattie, 2010; Magnier & Schoenberger, 2017).

The Sum of Squares indicates that the total variation in green purchase intentions is 27.282, with only a small portion (0.754) explained by the regression model, further confirming that trust in eco-friendly labels alone does not explain much of the variance in green purchase intentions. The residual sum of squares (26.528) shows that the model does not capture a significant portion of the data's variability, indicating that additional predictors need to be included in the model to improve its explanatory power.

The Coefficients Table provides more detailed insights into the relationship between trust in eco-friendly labels and green purchase intentions. The Constant ($B = 3.840$) represents the baseline level of green purchase intentions when there is no trust in eco-friendly labels. This positive coefficient indicates that even without trust in eco-labels, consumers may still have a predisposition towards green purchasing behaviors, possibly driven by other factors such as environmental awareness or personal values. This finding is consistent with research suggesting that eco-friendly attitudes and personal values significantly influence purchase decisions, often independent of product labels (Chen, 2010; Magnier & Schoenberger, 2017).

The $B = 0.094$ for the predictor variable, trust in eco-friendly labels, indicates that a one-unit increase in trust toward eco-friendly labels is associated with a 0.094-unit increase in green purchase intentions. While the t-value (1.686) and p-value (0.095) suggest that this effect is not statistically significant at the 0.05 level, it is close to being significant, indicating that trust in labels may have a weak, positive influence on green purchase intentions. This finding resonates with previous studies that suggest a weak but positive link between eco-label trust and consumer behavior, though not a primary determinant (Peattie, 2010; Magnier & Schoenberger, 2017).

The Standardized Coefficient ($Beta = 0.166$) reflects the strength of the relationship between the predictor and the dependent variable. While the positive Beta value indicates a

weak positive relationship, its low magnitude further supports the conclusion that trust in eco-friendly labels has a limited impact on consumer purchase intentions. This aligns with research showing that while eco-labels can influence consumer choices, other factors such as price, product quality, and convenience often outweigh the impact of eco-labels (Johnstone & Tan, 2015; Biswas & Roy, 2015).

The regression analysis in shows that trust in eco-friendly labels has a weak and statistically insignificant effect on green purchase intentions. While trust in labels does appear to have a positive effect on consumer behavior, this influence is minimal and does not substantially contribute to green purchase decisions. These findings are in line with existing research suggesting that environmental motivations alone do not always lead to sustainable consumption, as consumers consider a broader set of factors when making purchasing decisions (Chen, 2010; Peattie, 2010; Biswas & Roy, 2015). The low explanatory power of the model ($R^2 = 0.028$) and the lack of statistical significance further suggest that other variables, such as product quality, price, and consumer values, are likely more important drivers of green purchase intentions. Future research could focus on exploring additional factors that contribute to green consumer behavior and offer more comprehensive models to better understand the complexities of sustainable purchasing decisions.

IV. CONCLUSION

Trust in eco-friendly labels influences green purchase intentions, though it is neither the sole nor the most significant factor. The validity of the regression model confirms that trust in eco-labels has a modest but meaningful impact on green purchase intentions. However, the relationship between trust in eco-labels and green purchasing is relatively weak, highlighting that other factors such as product quality, environmental awareness, and price play a more substantial role in shaping consumer behavior. Green purchase intentions are not entirely dependent on trust in eco-labels, as a baseline level of intention exists, driven by broader influences like environmental consciousness and perceived product value. These findings emphasize the limited standalone impact of eco-label trust and the need for a more comprehensive approach to promoting green consumption. Businesses and policymakers should complement eco-labeling efforts with initiatives that increase environmental awareness, improve product quality, and address affordability concerns. While eco-labels serve as important signals of sustainability, they are most effective when integrated into a broader strategy that fosters a sustainable consumer culture and drives the adoption of eco-friendly products.

This study offers significant insights for various stakeholders. For businesses, it highlights the need to design marketing strategies that combine eco-labels with compelling sustainability messages and consumer education. Policymakers can use these findings to craft policies that not only encourage eco-labeling but also support public awareness campaigns and strengthen eco-labeling standards.

Academia benefits from this research by gaining empirical evidence about Generation Z consumers in Kenya, opening avenues for future studies on social influences and the availability of sustainable products. Consumers also stand to benefit by gaining a better understanding of how various factors, including eco-label trust, influence their purchasing decisions, enabling them to make more informed choices. This study underscores the importance of a holistic approach to green marketing. Integrating eco-labels with broader sustainability efforts provides a pathway to fostering sustainable consumer behaviors and addressing the unique preferences and needs of Generation Z in Kenya.

RECOMMENDATIONS FOR FUTURE RESEARCH

Future research on eco-conscious purchasing behavior among Generation Z consumers in Kenya should consider several avenues to deepen understanding and address emerging gaps. Firstly, exploring the influence of income disparities on eco-friendly purchasing decisions could provide a clearer picture of how economic factors limit sustainable consumption. Future studies could segment respondents by income levels to identify strategies that make green products more accessible to lower-income groups. This would allow businesses to tailor their offerings in a way that balances environmental sustainability with affordability.

Another area for future research is the role of social media and digital platforms in shaping environmental awareness and purchasing behavior among Generation Z. Given that this generation is highly active online, examining how social media influencers, online campaigns, and peer recommendations impact eco-conscious consumption would be valuable. This could lead to more effective marketing strategies for businesses looking to engage Gen Z consumers through digital platforms.

Additionally, investigating the long-term impact of eco-labels and certifications on consumer trust is crucial. While this study found moderate concern about the trustworthiness of eco-labels, further research could explore the factors that contribute to or undermine their credibility. A deeper dive into the effectiveness of various types of eco-labels, as well as consumer education initiatives aimed at improving their understanding, could enhance sustainable purchasing behavior.

Finally, expanding the research to include qualitative methods, such as in-depth interviews or focus groups, would provide richer insights into the motivations and barriers behind eco-conscious purchasing. These methods could uncover deeper psychological, cultural, or societal influences that quantitative surveys may overlook. Understanding the contextual factors that drive or hinder eco-conscious behavior could help businesses create more personalized and culturally relevant strategies for promoting sustainable consumption.

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