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Article

Assessing the Impact of Eco-Labeling on Purchase Intentions of Young Consumers in Enugu State, Nigeria

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Abstract: Eco-labelling plays a crucial role in encouraging sustainable consumer behaviour by giving clear information about a product's environmental impact. This study looks at how eco-labelling affects the buying decisions of young consumers in Enugu State, Nigeria. Using a cross-sectional survey approach, 430 undergraduate students from five universities participated in an online questionnaire. The research focused on understanding how aware young consumers are of eco-labels, how these labels influence their buying decisions, and whether they are willing to pay more for eco-labelled products. The data were analysed through descriptive statistics, including average scores and variations. The results showed that young consumers have a moderate to high level of awareness of different eco-labels, with the NAFDAC Green Dot being the most recognised (average score = 4.12, variation = 0.96). Eco-labelling was found to have a significant influence on their purchasing decisions, especially in building trust in the products (average score = 4.31, variation = 0.71) and their willingness to pay a higher price (average score = 4.21, variation = 0.83). Overall, the study shows that eco-labelling has a positive impact on young consumers' buying choices and could be a valuable tool for promoting more sustainable consumption in Nigeria. The study recommends increasing awareness through educational campaigns, building consumer trust in eco-labelling, and using effective marketing strategies to boost recognition and adoption of eco-labelled products.

Keywords: eco-labelling; purchase intentions; young consumers; eco-labelled products

Introduction

Eco-labelling, also known as environmental product labelling (Taufique et al., 2019), is a method for informing consumers about a product's impact on the natural world. Miranda-Ackerman and Azzaro-Pantel (2017) describe the process as measuring a product's carbon footprint, water use, and social responsibility through a label or certification. Taufique et al. (2019) define eco-labels as providing consumers with consistent and accurate information about a product's environmental impact. Eco-labeling has the potential to inspire environmentally conscious purchase decisions. Emblems or symbols that are easily visible on labels are commonly used to indicate products that have been marked or certified as meeting specific environmental standards and regulations (Gerrard et al., 2013). According to Magnie and Cri   (2015), these symbols serve not just to educate consumers about a product's eco-friendliness, but also to indicate legitimacy and reliability.

Moreover, eco-labelling is based on the idea that consumers want honest information about the products they buy and how those products impact the environment (Witek, 2017). The main goal of eco-labelling is to provide clear and easy-to-understand details about a product's sustainability, helping people make more environmentally friendly choices (Lehmann & Beikirch, 2020). Governments, regulatory bodies, industry associations, and NGOs often work together on eco-labelling initiatives to set standards that reflect their shared environmental goals (Jonkut & Stanikis, 2019). These standards can vary depending on the product type and the most urgent environmental concerns within that sector. According to Taufique et al. (2019), for eco-labelling to succeed,

consumers need to be able to recognise, understand, and trust the labels. When shoppers can identify and make sense of eco-labels, they are more likely to trust the information provided. This highlights the importance of effective communication and consumer education, as increasing awareness and understanding of eco-labels can strongly influence people's buying decisions (Daugbjerg et al., 2014).

Purchase intentions are a person's intended or expected behaviour towards purchasing a particular good or service (Maichum et al., 2016). Said another way, it assesses a consumer's future purchase likelihood (Fu & Elliott, 2013). Personal preferences, product qualities, price, and outside influences all affect these intentions (Jaafar et al., 2012). According to Panopoulos et al. (2022), while discussing eco-labelling, the term "purchase intentions" refers to customers' propensity to acquire items that have received sustainability certifications. Consumers are more likely to buy eco-labelled products, according to Vitale et al. (2020), since they believe they have superior environmental effects. This shows an increasing awareness in environmental sustainability since eco-labels provide obvious markers of a product's environmental friendliness (Cherian & Jacob, 2012).

Moreover, various aspects related to eco-labelling influence customer purchasing decisions (Li & Cristina Mincic, 2020). One important consideration is the perceived effectiveness of the eco-labelling scheme (Carlsson et al., 2022). Consumers typically evaluate the standards and criteria underlying eco-labels to determine whether the products actually provide environmental advantages (Kirby et al. 2014). The more customers believe the eco-label is effective, the more likely they are to buy the labelled products (Göçer & Sevil Oflaç, 2017). Shah et al. (2023) discovered that trust in the labelling scheme and the organisation behind it had a considerable impact on consumers' purchasing intentions. For eco-labels to be effective, consumers must trust the trustworthiness and integrity of the information supplied. This trust is frequently based on the reputation of the certifying organisation (Kumar et al., 2021). Singh et al. (2023) found that consumers are more likely to buy eco-labelled products if they trust the certification authorities.

In addition to trust, peer influence and social pressure can impact customer purchase decisions. People are frequently influenced by the activities and beliefs of their social circles (Al-Rawabdeh et al., 2021). According to research, customers are more inclined to purchase eco-labelled products if they believe their peers respect and support eco-labelling and sustainable purchasing (Panopoulos et al., 2022). Understanding these factors is critical for politicians, marketers, and businesses in Enugu State. By investigating how these characteristics influence young customers' purchase decisions, strategies can be devised to adapt marketing efforts, improve consumer education, and promote environmentally responsible shopping habits.

In Enugu State, the rapid urbanisation and economic growth have resulted in a shift towards materialistic lifestyles among young individuals (Anah & Asogwa, 2017). At the same time, rising environmental concerns necessitate investigating the influence of eco-labelling in affecting young customers' tastes. To promote sustainable development and environmental conservation efforts in Enugu, it is critical to investigate how eco-labelling activities influence the purchasing decisions of these young customers. This study seeks to close this gap by investigating the impact of eco-labelling on consumers' purchase decisions in Enugu State, Nigeria.

Research Aim

The aim of this study was to examine the impact of eco-labelling on young consumers' purchase intentions in Enugu State.

Research Objectives

The objectives of the study are;

1. To determine the level of awareness of eco-labelling among young consumers.
2. To examine the impact of eco-labelling on young consumers' purchase intentions.
3. To investigate the willingness of young consumers to pay a premium for eco-labelled products.
4. To provide recommendation for or increasing the adoption and impact of eco-labelling initiatives among young consumers.

Research Questions

Also, the research questions are as follows:

1. What is the level of awareness of eco-labelling among young consumers in Enugu State?
2. How does eco-labelling influence young consumers' purchase intentions?
3. What is the willingness of young consumers to pay a premium for eco-labelled products in Enugu State?
4. What recommendations can be provided to increase the adoption and impact of eco-labelling initiatives among young consumers?

Methodology

Descriptive research methodology was used for this study. A cross-sectional study approach was taken for this investigation. The cross-sectional study design enabled the collection of data at a single point in time, yielding important insights into young consumers' current levels of knowledge, attitudes, and actions in regards to eco-labelled products .Participants were selected using a convenience sampling method, which is a non-probabilistic method. Young adults in Enugu State, and more specifically undergraduates, were the intended audience. 430 students from five different universities in Enugu State (University of Nigeria, Nsukka [UNN], Enugu State University of Science and Technology [ESUT], Institute of Management and Technology [IMT], and Caritas University and Renaissance University) filled out online surveys to contribute to the study. Availability of resources and the potential for success played a role in determining the size of the sample.

Online surveys were used to collect the information. The questionnaire used multiple-choice and Likert-scale questions to assess respondents' familiarity with eco-labelling, ability to make purchases, and preparedness to pay more for products bearing such labels. The survey was distributed online (via a Google form), making it more convenient for the intended respondents to take part. Statistical methods were used to analyse the data collected in order to answer the research questions. To summarise and characterise the responses of the participants, descriptive statistics such as mean, and standard deviation were used. All aspects of the study were conducted ethically. Prior to participating, participants gave their consent, guaranteeing anonymity and free will. The study's limitations must be taken into account. The first issue is that results may not be generalised beyond the sample size if they were collected using a convenient sampling method. Self-reported data via online surveys may also be prone to response biases. Therefore, care needs to be taken when extrapolating from the data.

Findings

Table 1 displays the extent to which young consumers are familiar with various eco-labelling certifications. The mean scores show a range from moderate to high awareness, with NAFDAC Green Dot receiving the highest score (4.12). The prevalence of organic certification, green building certification, and green product certification also demonstrates awareness. There is a moderately lower level of knowledge about Green Energy Certification and BioTrade Certification. Variation in levels of consciousness can be seen in the standard deviations, with the NAFDAC Green Dot showing the most variation (0.96). These results show the importance of promoting and educating the public about specific eco-labels and certifications, especially those with lower scores, while also capitalising on the popularity of well-known eco-labels.

Table 1. Mean and SD of respondents with respect to the level of awareness of eco-labelling among young consumers.

S/N	Level of awareness of eco-labelling	Mean	SD
1.	Green Energy Certification	3.56	.67
2.	Organic Certification	3.77	.87
3.	Green Building Certification	3.91	.91

4.	Green Product Certification.	3.81	.78
5.	NAFDAC Green Dot	4.12	.96
6.	BioTrade Certification	3.31	.81

The influence of eco-labelling on the purchasing decisions of young consumers is shown in Table 2. The highest mean score was 4.31 for increased trust and credibility in purchasing decisions, indicating a moderate to high impact. Favourable perception of eco-labelled products (4.07) and Influence on willingness to pay a premium (4.21) both had high scores, indicating that eco-labelling has a positive impact on perceptions and purchasing decisions. Other factors, such as increased environmental consciousness (3.51 out of 5) and positive environmental impact contribution (3.51 out of 5), were rated more moderately. There is a wide range of opinions, with the least dispersion being associated with increased trust and credibility (standard deviation = 0.71). These results demonstrate the crucial function of eco-labelling in influencing the purchasing decisions of young consumers and fostering a more sustainable consumer culture.

Table 2. Mean and SD of respondents with respect to the impact of eco-labelling on young consumers' purchase intentions.

S/N	Level of adoption	Mean	SD
7.	Increased environmental consciousness	3.51	.74
8.	Favorable perception of eco-labeled products	4.07	.76
9.	Enhanced trust and credibility in purchasing decisions	4.31	.71
10.	Differentiation and competitive advantage for eco-labeled products	3.40	.83
11.	Alignment of purchase intentions with ethical and moral values	3.37	.66
12.	Influence on willingness to pay a premium for eco-labeled products	4.21	.83
13.	Contribution to positive environmental impact through consumer choices	3.51	.69

Table 3 demonstrates that young consumers are willing to pay a significant premium for eco-labelled products due to factors such as perceived value, trust, and environmental benefits. The highest weight given to price sensitivity and financial considerations (4.19 points) indicates the significance of these factors in making choices. Product differentiation and perceived product benefits (4.11), and trust and credibility in eco-labelling systems (4.12), were also important. The lowest standard deviation was found for the factor Price sensitivity and financial considerations (0.69), indicating that this factor elicited relatively consistent responses. These results highlight the significance of these factors in shaping the premium payment decisions of young consumers for eco-labelled products.

Table 3. Mean and SD of respondents with respect to the willingness of young consumers to pay a premium for eco-labelled products.

S/N	Willingness to pay a premium for eco-labelled products	Mean	SD
14.	Perceived environmental benefits	3.95	.91
15.	Trust and credibility in eco-labeling systems	4.12	.76
16.	Alignment of personal values with sustainability	3.89	.91
17.	Product differentiation and Perceived product benefits	4.11	.73
18.	Price sensitivity and financial considerations	4.19	.69
19.	Education and awareness about environmental issues	4.02	.59
20.	Individual preferences and priorities	3.99	.74

Discussion

The findings in Tables 1, 2, and 3 provide strong insights into young consumers' awareness of eco-labelling, its impact on purchase intentions, and willingness to pay a premium for eco-labelled products. These findings coincide with earlier studies on consumer behaviour and environmental labels.

Beginning with awareness, the research reveals that young consumers have a modest to high degree of knowledge regarding eco-labels. This result matches past research. For instance, according to Taufique et al. (2014), the type of certification influences consumer knowledge of eco-labels. Grunert et al. (2014) also found that customers often show modest to high degrees of awareness with eco-labels. This implies that, especially for eco-labels with less awareness, further educational programs and promotional activities are required to raise awareness even more (Table 1). For example, the lower marks for Green Energy Certification and BioTrade Certification emphasise the need of focused efforts to increase awareness and knowledge among young customers.

Moving on to the impact of eco-labelling on purchase intentions, the study's findings are consistent with prior research, which has shown that eco-labelling has a beneficial influence on consumer perceptions and decisions. As well as willingness to pay a premium, match findings by Soon & Kong (2012) and Wang et al. (2019), the high mean scores for elements such favourable perception of eco-labelled items, improved trust, and credibility in purchasing decisions match. These studies also highlight the significant part eco-labelling performs in influencing consumer behaviour and advancing sustainable consumption (Table 2).

Regarding the readiness to spend more for environmentally friendly products, the results likewise line up with past research. Previous research by Borin et al. (2011) and Göçer & Sevil Oflaç (2017) reveal that customers are ready to pay more for eco-labelled products due of the perceived environmental benefits, faith in the labelling system, and alignment with their personal values. < In this study, the high mean scores and low standard deviations point to young customers' strong and constant willingness to spend more for environmentally friendly products (Table 3).

Conclusion

The study provides insights on young consumers' knowledge of eco-labelling, its influence on purchasing intentions, and their readiness to pay more for eco-labelled items. The results show that young consumers have a moderate to high degree of knowledge, with the most well-known eco-labels being NAFDAC Green Dot, Organic Certification, Green Building Certification, and Green

Product Certification. Furthermore, eco-labelling has a major impact on young customers, particularly in terms of increasing trust, trustworthiness, and favourable product views. Importantly, consumers' willingness to pay a higher price for eco-labelled items is significantly connected to their view that their purchases have a beneficial environmental impact, faith in the eco-labelling system, and a shared commitment to sustainability. This demonstrates how eco-labelling may influence purchase decisions, particularly when young customers are secure in the environmental advantages and ethical reasons that underpin their choices.

Recommendations

Based on the study findings, several recommendations can be provided to key stakeholders, such as consumer groups in Nigeria, the Federal Competition & Consumer Protection Commission (FCCPC), businesses, and consumers, to further promote eco-labelling and sustainable consumption among young consumers:

1. **For Consumer Groups:** Consumer groups should lead eco-labelling awareness campaigns, especially for less-known certifications like Green Energy and BioTrade. They can educate young consumers through workshops, social media, and outreach, and collaborate with schools to embed eco-labelling into curricula to promote sustainable habits.
2. **For the Federal Competition & Consumer Protection Commission (FCCPC):** FCCPC should enforce transparency in eco-labelling, ensuring claims are accurate through regular audits. Collaborating with international organisations to adopt global eco-labelling standards would build consumer trust and promote consistency across industries.
3. **For Businesses:** Nigerian businesses should adopt eco-friendly production methods and clearly communicate the benefits of eco-labelled products. Certification from credible bodies and affordable pricing strategies will help attract young consumers and build trust in eco-labelled products.
4. **For Consumers:** Young consumers should prioritise eco-labelled products and educate themselves on their significance. By promoting eco-friendly choices and engaging in sustainability discussions, they can influence peers and foster a culture of responsible consumption.

These steps aim to create a more sustainable marketplace, benefiting both consumers and the environment.

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