

Information Exposure in the Evaluation and Selection of Eco-Friendly Apparels among Nigerian Undergraduates

Abigail Olukemi Olugbamigbe

Department of Home Economics, Adeyemi Federal University of Education, Ondo, Ondo State, Nigeria

DOI: <https://doi.org/10.51244/IJRSI.2025.120800185>

Received: 29 July 2025; Accepted: 04 Aug 2025; Published: 18 September 2025

ABSTRACT

Textiles could be one of the most un-sustainable products in the world. In their entire lifecycle from growing the raw material or creating it from oil to manufacturing, selling and final disposal they can create a serious problem. The study examined the role of information exposure in undergraduates' evaluation and selection of eco-friendly apparel. The study employed the use of descriptive survey. The study was carried out on three hundred and ninety-one (391) students in Federal University of Technology, Akure, Ondo State. A structured questionnaire made up of 32 items was used for data collection. Responses to the questionnaire were analysed descriptively and inferentially. Findings revealed that information exposure on evaluation and selection of eco-friendly apparels helps form perceptions about products, relates valuable information about the environmental attributes of apparel items, it is a medium through which apparel companies build their brand identity among others. Findings also revealed that eco-friendly apparels can reduce skin irritation and infection as a result of chemicals used in production, boosts up the economy by using local resources and varieties, help socially by giving more premiums to the growers (farmers) among others. It was recommended that school administration, the government and non-governmental organizations such as the Green Institute Initiatives should organise orientation programmes to further educate undergraduates and the general public on the concept of eco-friendly and its importance and that textile producers and merchandisers should adopt a more environmentally and socially responsible supply-chain management-practice and promote such practices to consumers and other businesses.

Keywords – Eco-friendly, information exposure, students, sustainability

INTRODUCTION

Ever since the industrial revolution, human activities as continued to alter the balances in the ecosystem, this alteration has led to several environmental problems and pollution underscoring the importance of environment friendly activities. Burning of fossil fuel, commercial agriculture activities, indiscriminate disposal of wastes are some of the activities responsible for the depletion of the eco-system. As part of the strategies to ensure sustainability in the world, the concept eco-friendly emanated. The word 'eco' is short form ecology. Ecology is the study of the interactions between organisms and their environment. Therefore 'eco' friendly (or 'ecology friendly') is a term to refer to goods and services considered to inflict minimal or no harm to the environment.

Eco-friendly apparel refers to garments that have been created with consideration of the environmental impact of the production process and, when possible, have had harmful processes, chemicals, and materials replaced with less harmful substitutes (Brosdahl & Carpenter, 2010). Environmental consequences linked to the transportation, distribution, consumption, and eventual disposal of the product are also relevant. There is really no such thing as a 100% eco-friendly piece of clothing. This is because all clothing takes water (to grow the fibre which makes the fabric) and energy (to make the fabric and the garment). Eco-friendly clothing are clothing in which the producer ensured the use of fibres not grown or produced with damaging chemicals, and fabrics not coloured with harsh dyes and paints. Eco-friendly clothing might mean clothing made of fibres such as organic cotton and hemp, clothing that has been organically dyed with vegetables and fabrics that use small amounts of precious water to grow, such as hemp and bamboo (Kavitha & Soundri, 2015).

There are benefits at different life-cycle stages of the organic and eco-friendly fabrics trade, both for consumers and producers. In the larger scale of effects it is important to see that eco-Friendly textiles and clothing may travel half way around the world to reach the ethical customer. As the demand of such eco friendly garments is increasing there exists a great scope for new entrepreneur to enter into this field. Textile and clothing is a labour-intensive industry. It has many working procedures which form flow processes. Each process makes various influences on the environment and human health. There are increasing numbers of cases of people experiencing health problems such as rashes, allergies, respiratory and concentration problems due to chemical sensitivities. Many have found organic clothing to be helpful in reducing exposure to the vast amount of toxic chemicals (Kavitha & Soundri, 2015).

Although some research has investigated environmental concern and pro-environmental behavior in emerging economies, it is not known to what extent exposure to information regarding the environmental impact of the apparel supply chain and/or unsound apparel manufacturing practices (e.g., polluting water with harmful chemicals and producing large amounts of waste water) contribute to consumers' decision to purchase eco-friendly apparel. In most cases the choice of consumers on apparels is not often due to some environmental factors such as the weather condition or the harm it will pose on the environment. Fashion is one of the strong determinants of a consumer's choice of apparels, most especially consumers in the youthful age. Hence, the consumer behaviour of quick disposal of apparels due to fast fashion. Butler and Francis truly found out about the consumer attitude and a little bit ignorance in recognising the relationship between the apparels they are purchasing and its relationship or impact on the environment.

Ideally, a consumer should be able to evaluate the environmental friendliness of a product based on reliable information provided by all role players in the value chain. However, although advances have been made in the supply of eco-friendly apparel, misconceptions based on conflicting and/or misleading information prevail. A typical example includes the assumption that natural fibers such as cotton are more eco-friendly than synthetic fibers. In reality, cotton represents one of the most water- and pesticide-intensive crops in the world. Factual information such as the aforementioned is not always readily available (Ritch & Schroder, 2012). On the other hand, it is not certain whether exposure to such information could endorse eco-friendly apparel choices. In a recent study by Peterson, Hustvedt, and Chen (2012), respondents reacted negatively when exposed to additional information about wool production.

Customized approaches whereby information is tailored to the unique characteristics of specific consumer segments seem to be more successful. As an example, Lee, Choi, Youn, and Lee (2012) conclude that marketers should distinguish between consumers with low communication involvement who prefer straightforward uncomplicated messages and those with high communication involvement who require detailed information to ascertain the credibility of a pro-environmental claim. Whether it be uncomplicated or detailed, information is a basic requirement for consumers to make informed decisions as knowledge is a prerequisite to buying behavior and influences every stage of the consumer decision-making process. As pointed out by Ritch and Schroder (2012), consumer demand for eco-friendly apparel depends on information and knowledge about environmental issues, as it will contribute to apparel consumers' confidence in their own pro-environmental choices.

A significant portion of the world's non-degradable wastes is accrued from textile materials, most especially the inorganic ones. Textiles could be one of the most un-sustainable products in the world. In their entire lifecycle from growing the raw material or creating it from oil to manufacturing, selling and final disposal they can create a serious problem. In order to reduce/convert textile waste to wealth, several constituted and solo efforts has been made by the government and researchers, however, the problems associated with textile waste still remain. Eco-friendly apparels as noted earlier are apparels that pose little or no threat to the general make up of the environment.

The 21st century is an age where information can be easily passed across to the masses through the help of the mass and social media. There are a lot of news circulating over the media about different topics and occurrences and one of the prominent carriers of the information is the student (youths and adolescents). Since sustainable development has been described as a necessary ingredient of the 21st century, it is important for the

student population to make informed choices of apparels that are sustainable – eco-friendly apparels. This study is an effort to educate students on the importance of selecting eco-friendly apparels.

Purpose of the Study

The main purpose of the study was to examine the role of information exposure in undergraduates' evaluation and selection of eco-friendly apparel. Specifically, the study:

1. examined the methods of evaluating and selecting apparels by undergraduates;
2. examined perception of undergraduates about eco-friendly apparel;
3. highlighted the roles of information exposure on evaluation and selection of apparels; and
4. educated undergraduates on the importance of selecting eco-friendly apparels.

METHODOLOGY

A. Research Design

Descriptive survey design was employed for this study. This design was adopted because descriptive studies make no attempt to manipulate variables, and it is concerned with describing and interpreting existing relationships, attitudes, practical processes and tends to compare variables.

B. Sample and Sampling Technique

The sample size of the study was determined using Yaro Yamane formulae, $n = \frac{N}{1+N(e)^2}$. By calculation, the sample size for the study will be 391. Simple random sampling technique was used to select 391 in FUTA which constituted the sample size of the study.

C. Instrument for Data Collection

The research instrument that was used for the study was a fixed response structured questionnaire tagged: Information Exposure and Selection of Eco-friendly Apparel Questionnaire (IESEAQ). The questionnaire consists of five sections. The first section (Section A) consist of the personal data of the respondents, section B consist of fixed response items on the methods of evaluating and selecting apparels, section C consist of fixed response items on perception about eco-friendly apparel, section D consist of fixed response items on the roles of information exposure on evaluation and selection of apparels while section E consist of fixed response items on the importance of selecting eco-friendly apparels.

The questionnaire was structured in English Language. The instrument was validated by two (2) experts in Home Management and Clothing and Textile and had a reliability index (r) of 0.913.

D. Analysis of Data

The frequency of respondents' response for each item was counted and the percentage was calculated. The mean of the questionnaire items was used and interpreted based on the statistical real limits of the numbers as follows;

Table I Response Category Boundary

Category	Point	Limit
Strongly agree (SA)	4	3.50-4.00

Agree (A)	3	2.50-3.49
Disagree (D)	2	1.50-2.49
Strongly disagree (SD)	1	0.50-1.49

A cut-off point (COP) was used to determine accepted or rejected items. The cut-off point was obtained by adding up all the items. The formula for attaining the cut-off point is totaling the nominal values divided by the number of nominal values. Any mean between 2.50 and above was considered as agreed, while any mean below 2.50 was considered as disagreed.

RESULTS

Methods of evaluating and selecting apparels by undergraduates

Table 2: Methods Of Evaluating And Selecting Apparels By Undergraduates

N = 391			
S/N	Methods of evaluating and selecting apparels by undergraduates	Frequency	Rank
1.	Information provided about the apparel.	261(66.8)	4 th
2.	Market dominated apparels	198(50.6)	7 th
3.	Type of retail store information/advertising	201(51.4)	6 th
4.	Personal/interpersonal sources	233(59.6)	5 th
5.	Product labels and hangtags	152(38.9)	8 th
6.	Radio talk shows	138(35.3)	9 th
7.	Price and affordability	361(92.3)	1 st
8.	Type of fabric construction and sensational characteristics	302(77.2)	2 nd
9.	Country of origin	274(70.1)	3 rd
10.	Eco-labeling	101(25.8)	10 th

Key: N = total number of respondents

Table 2 presents the methods of evaluating and selecting apparels by undergraduates. The table revealed that price and affordability (92.3%), type of fabric construction and sensational characteristics (77.2%) and country of origin (70.1%) were some of the evaluating and selecting apparels. Respondents also selected and evaluated apparels based on the information provided about the apparel (66.8%), through personal/interpersonal sources (59.6%), type of retail store information and advertising and market dominated apparels (50.6%).

Perception of undergraduates about eco-friendly apparel

Table 3 Mean Rating On Perception Of Undergraduates About Eco-Friendly Apparel

S/N	Perception of undergraduates students about eco-friendly apparel	$\bar{X} \pm SD$
1.	Eco friendly apparels are the garments that are produced with consciousness of the	3.60±0.533

	negative contribution of the production processes to the environment.	
2.	Eco-friendly textiles are sustainable.	2.37±0.851
3.	Eco-friendly fabrics are cheap.	2.82±0.847*
4.	All natural fibers are eco-friendly.	2.26±0.862
5.	Eco-friendly apparels are made from a renewable resource.	2.95±1.052*
6.	Eco-friendly fabrics require too much land to grow fully.	3.13±0.897*
7.	Eco-friendly fabrics use excessive chemicals in their production.	2.99±0.611*
8.	All synthetic fibers are eco-friendly.	2.78±1.055*

* mean greater than cut-off point (2.5) accepted as agreed

Key: \bar{X} = mean, SD = standard deviation

Table 3 revealed that the mean responses of undergraduates on items 1, 3, 5, 6, 7 and 8 ranged from 2.82 to 3.60 and were greater than the cut-off point (2.5). Hence, respondents agreed to the items statement.

Roles of information exposure on evaluation and selection of eco-friendly apparels

Table 4 Mean Rating On The Roles Of Information Exposure On Evaluation And Selection Of Eco-Friendly Apparels

S/N	Roles of Information Exposure on Evaluation and Selection of Eco-friendly Apparels	$\bar{X} \pm SD$
1.	Product labeling and information found in store are seen as important marketing tools because perceptions about products are formed.	2.88±0.891*
2.	The attributes convey on product labeling and hangtags fulfill an important role in consumers' evaluation and selection of conventional and eco-friendly apparel.	2.97±0.874*
3.	Fibre content relates valuable information about the environmental attributes of apparel items.	2.88±0.808*
4.	Product labeling/hangtags have also become important mediums through which apparel companies build their brand identity.	2.69±0.873*
5.	Eco-labelling can also assist consumers in identifying eco-friendly apparel	2.65±1.023*
6.	Through exposure to trustworthy, well-directed information about fabrics consumers might be able to improve their knowledge on the environmental friendliness.	2.90±0.674*
7.	Eco-labelling provides more assurance that a product is made according to environmental standards.	3.02±0.943*

* mean greater than cut-off point (2.5) accepted as agreed

Table 4 revealed that the mean responses of undergraduates on all items ranged from 2.65 to 3.02 and were greater than the cut-off point (2.5). Hence, respondents agreed to all items statement.

Importance of selecting eco-friendly apparels

Table 5 Mean Rating On The Importance Of Selecting Eco-Friendly Apparels

S/N	Importance of Selecting Eco-friendly Apparels	$\bar{X} \pm SD$
1.	Many conventional dyes and fixatives contain heavy metals and dioxins that are found to cause cancer.	$2.72 \pm 1.029^*$
2.	To reduce skin irritation and infection as a result of chemicals used in production.	$2.91 \pm 0.989^*$
3.	The organic cotton boosts up the economy by using local resources and varieties.	$2.60 \pm 0.918^*$
4.	Eco-friendly apparels help socially by giving more premiums to the growers (farmers).	$2.62 \pm 1.097^*$
5.	It eliminates the risks of chemical impact on human beings and its surroundings.	$2.86 \pm 0.865^*$
6.	Organic cotton also ensures food security and health care by providing contamination free food.	$2.89 \pm 0.751^*$
7.	Eco-textile made of soy fibers help to reduce waste.	$2.79 \pm 0.902^*$

* mean greater than cut-off point (2.5) accepted as agreed

Table 5 revealed that the mean responses of undergraduates on all items ranged from 2.65 to 3.02 and were greater than the cut-off point (2.5). Hence, respondents agreed to all items statement.

DISCUSSION OF FINDINGS

Selecting and evaluating apparels could be a carefully orchestrated or done haphazard. For a carefully orchestrated procedure, some of the things undergraduates consider include price and affordability, type of fabric construction and sensational characteristics, country of origin, information provided about the apparel, personal/interpersonal sources, type of retail store information and advertising and market dominated apparels. In line with this finding, Norum (2005) observed that price is often the main criterion for choice in apparel decision making. Media sources such as television and radio programmes as well as magazines and newspaper articles are considered neutral sources of information about apparels. Similarly, in terms of environmental issues respondents' main sources of information were newspapers, television, and radio and van Staden and van Aardt (2011) rated retail store information/advertising as the most influential source of fashion information.

On the perception of undergraduates about eco-friendly apparel, it was observed that students did not have a clear idea of eco-friendly apparel. For instance they rightly noted that eco-friendly apparels are the garments that are produced with consciousness of the negative contribution of the production processes to the environment, are made from a renewable resource and that eco-friendly textiles are sustainable. According to Ali (2016) eco-friendly apparel can be termed as the garments that are produced keeping in mind elimination or reduction of the processes, materials or actions that contribute negatively for environmental and social echelons of society. However, they misconstrued eco-friendly apparels to be cheap, natural fibres, require too much land to grow fully, require use of excessive chemicals in their production and that they are all synthetic fibres. Eco-friendly attributes include the use of sustainably grown or raised ingredients, produced in ways that do not deplete the ecosystem. Hustvedt and Bernard (2010) and Ritch and Schroder (2012) observed that price and affordability are issues frequently highlighted in consumers' acceptance of eco-friendly alternatives, indicating that eco-friendly apparels are not cheap. Evidently, eco-friendly fabrics do not come cheap.

The study also examined the roles of information exposure on evaluation and selection of eco-friendly apparels. It was observed that product labeling and information found in store are seen as important marketing

tools because perceptions about products are formed, the attributes convey on product labeling and hangtags fulfill an important role in consumers' evaluation and selection of conventional and eco-friendly apparel and that fibre content relates valuable information about the environmental attributes of apparel items. In line with this finding, Hyllegard, Paff Ogle and Lee (2012) noted that product labeling and hangtags usually convey information about the product such as the price, country of origin, brand name and other characteristics such as fibre content. Ritch and Schroder (2012) added that these attributes (price, country of origin, brand name and other characteristics such as fibre content) fulfill an important role in consumers' evaluation and selection of conventional and eco-friendly apparel.

Similarly, the study found out that product labeling/hangtags have also become important mediums through which apparel companies build their brand identity, eco-labelling can also assist consumers in identifying eco-friendly apparel, through exposure to trustworthy, well-directed information about fabrics consumers might be able to improve their knowledge on the environmental friendliness and that eco-labelling provides more assurance that a product is made according to environmental standards. In line with this finding, D'Souza, Taghian and Lamb (2006), Hyllegard *et al.* (2012) opined that product labeling and information found in store are seen as important marketing tools because perceptions about products are formed to some extent by exposure to advertising and/or information on product labels.

Eco-friendly apparels are important for environmental sustainability. An examination of the importance of selecting eco-friendly apparels revealed that respondents conceived that many conventional dyes and fixatives contain heavy metals and dioxins that are found to cause cancer, eco-friendly apparels can reduce skin irritation and infection as a result of chemicals used in production and that the organic cotton boosts up the economy by using local resources and varieties. In line with this finding Malik (2014) remarked that conventional garments are often contaminated with chemical dyes and garment finishes.

Furthermore, the findings revealed that eco-friendly apparels help socially by giving more premiums to the growers (farmers), it eliminates the risks of chemical impact on human beings and its surroundings, organic cotton also ensures food security and health care by providing contamination free food and eco-textile made of soy fibers help to reduce waste. In consonance with the finding of the study, the organic cotton is beneficial in many ways; it creates healthy environment and boosts up the economy by using local resources and varieties, it helps socially by giving more premiums to the growers (Farmers) and eliminates the risks of chemical impact on human beings and its surroundings by eliminating the extensive use of fertilizers and pesticides during its growth. Also it is in line with the assertion of Kavitha and Soundri (2015) that many have found organic clothing to be helpful in reducing exposure to the vast amount of toxic chemicals people are unknowingly exposed to on a daily basis. Fabrics and textiles that is truly sustainable and eco-friendly is essential these days.

CONCLUSION

Students do not have a clear and informed idea about eco-friendly apparels but seem to understand the importance and the roles of information exposure in the selection and evaluation of eco-friendly apparels. Students consider price and affordability, type of fabric construction and sensational characteristics, country of origin, information provided about the apparel, personal/interpersonal sources, type of retail store information and advertising and market dominated apparels when selecting or evaluating apparels. Information exposure is the key to informing students on the environmental attributes of apparel items, brand identity, identifying eco-friendly apparel and improving consumers' knowledge on the environmental friendliness.

RECOMMENDATIONS

Based on the research findings, the followings were recommended:

- there should be orientation programmes organized by the school administration, the government and non-governmental organizations such as the Green Institute Initiatives to further educate undergraduates and the general public on the concept of eco-friendly and its importance;

- strict laws restricting/limiting the use of non eco-friendly items should be made by the government and effectively monitored to ensure adherence of ;
- textile producers and merchandisers should adopt a more environmentally and socially responsible supply-chain management-practice and promote such practices to consumers and other businesses
- business managers need to communicate the environmental and social impacts associated with product use to their consumers. This means addressing and making consumers aware of any hidden costs of product ownership and educating consumers on how to decrease their “carbon” footprint when they make purchases.
- businesses can also institute such practices, in addition to bigger initiatives, such as company-wide recycling programmes to conserve natural resources and telecommuting for employees, which decreases air pollution and fuel consumption by eliminating daily travel to work. Companies sometimes label their products "eco-friendly" or "environmentally friendly" without them truly being so. Called "green washing," marketing campaigns perpetuate this practice, aimed at helping companies increase their product sales by appealing to ecologically conscious buyers.

REFERENCES

1. Ali, S. (2016). Analysis of consumer perception about eco-friendly apparel. A Master Thesis of Tampere University of Technology.
2. Brodahl, D. J. C., & Carpenter, J. M. (2010). Consumer knowledge of the environmental impacts of textile and apparel production, concern for the environment, and environmentally friendly consumption behavior. *Journal of Textile and Apparel Technology and Management*, 6, 1–9.
3. Hustvedt, G., & Bernard, J. C. (2010). Effects of social responsibility labelling and brand on willingness to pay for apparel. *International Journal of Consumer Studies*, 34, 619–626.
4. Hyllegard, K. H., Yan, R., Paff Ogle, J., & Lee, K. (2012). Socially responsible labeling: The impact of hang tags on consumers' attitudes and patronage intentions toward an apparel brand. *Clothing and Textiles Research Journal*, 30, 51–66.
5. Kavitha, S., & Soundri, S. G. M. (2015). Eco-friendly textiles and clothing. *International Journal of Science Technology & Management*, 4(1), 568-571.
6. Lee, N., Choi, Y. J., Youn, C., & Lee, Y. (2012). Does green fashion retailing make consumers more eco-friendly? The influence of green fashion products and campaigns on green consciousness and behavior. *Clothing and Textiles Research Journal*, 30, 67–82.
7. Malik, S. (2014). The scope and growth of Eco-Friendly clothing in the modern society. A Bachelor degree thesis of the Indus Valley School of Art and Architecture.
8. Norum, P. S. (2005). A comparison of apparel garment prices by national, retail, and private labels. *Clothing and Textiles Research Journal*, 21, 142–148.
9. Peterson, H. H., Hustvedt, G. M., & Chen, Y. (2012). Consumer preferences for sustainable wool products in the United States. *Clothing and Textiles Research Journal*, 30, 35–50.
10. Ritch, E. L., & Schroder, M. J. (2012). Accessing and affording sustainability: The experience of fashion consumption within young families. *International Journal of Consumer Studies*, 36, 203–210.
11. van Staden, J., & van Aardt, A. M. (2011). Information seeking by female apparel consumers in South Africa during the fashion decision-making process. *International Journal of Consumer Studies*, 35, 35–49.