Corporate Enviropreneurship: Greening the Pricing and Promotion Practices of Polythene Manufacturing Companies for Consumer Sustainability in Nigeria

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Abstract

The study focused on corporate enviropreneurship, with the specific objective of determining the green pricing and promotion practices for polythene companies to achieve sustainable consumption in Nigeria. The embedded type of mixed method research design was adopted for the study which 323 respondents, comprising of 35 marketing lecturers, 60 managers of polythene manufacturing companies, and 223 polythene consumers in Nigeria were used to collect data. Questionnaire and focus group discussion were the instruments employed to gather data, which were validated by five experts. Cronbach Alpha reliability method was used to determine the internal consistency of the questionnaire. The overall reliability index for the instrument was 0.89. The collected data were analyzed using mean, standard deviation and analysis of variance statistics. The study found 18 green pricing and 18 promotion frameworks that are highly essential for polythene companies to achieve sustainable consumption practices. Based on the findings of the study, it was concluded that the adoption of green pricing and promotion practices by polythene companies would ensure sustainable consumption in Nigeria. It was recommended, among others, that polythene manufacturing companies adopt green pricing and promotion practices to achieve consumer and environmental sustainability.

Keywords:

Green Pricing Practices, Green Promotion Practices, Consumer Sustainability, Polythene Manufacturing Companies

INTRODUCTION

In today's ever-changing business world, manufacturing companies are faced with the challenge of making profit as well as ensuring the sustenance of the environment by engaging innovative practices of sustaining their customers. They want to improve their financial and other performance so they can keep up with their day-to-day needs and long-term existence. This implies mean that firms have to keep up with fast-paced changes and transformations in

order to stay ahead of the competition. Research has shown that one of the major causes of environmental degradations comes from the activities of manufacturing companies (Schemeemaker et al. 2018; Mshothola, et al., 2019). To this end, corporate enviropreneurship practices have become imperative.

Corporate Enviropreneurship is the process of discovering and nurturing opportunities to create value through inventions and promoting such prospect without regard to either resources or the location of the firm this corporate philosophy encourages innovative systems and practices within an organization. It holds that corporations can reduce environmental problems through innovation by finding new ways to produce, package, and deliver goods and services to consumers and disposing or recycling the wastes created in the production or consumption of these goods or services (Coddington, 2013; Mirvis, 2014). This highlights why it is so important and good for firms to use these activities, as it encourages them to adopt more creative and entrepreneurial behavior. It's become a key strategy for firms to survive in the ever-changing world (Niemann, 2022; Lee, 2017).

The benefits of corporate enviropreneurship go beyond just improving the company's financial performance. It also means using resources more efficiently and using the right motivation system for employees to achieve environmental sustainability, taking into cognizance the fact that manufacturing companies in Nigeria are an integral part of the country's economic growth and development. They are responsible for the production of finished or intermediate goods, such as components or raw materials. These goods can be either directly sold to consumers or used by other manufacturing businesses for the production of other products. Polythene manufacturing companies are a significant group of manufacturing companies in the South-South of Nigeria. Despite the fact that these companies generate employment and revenue for the government, there have been allegations of inadequate management of environmental issues, such as waste materials generated from plastics/polythene products, which has become a major issue for polythene manufacturers who wish to succeed in a highly competitive market.

Polythene is an organic and natural plastic material with a higher molecular mass, typically produced from petrochemical sources. Plastic is a broad category of materials, with polythene being a sub-category of the primary category. Other types of plastic include Bakelite, melamine, and others. Polyethylene is a chemical compound made from ethylene, which is a transparent and odorless solid. It is available commercially in pellet form, but can also be converted into derivative products, including polythene bags and wrapping sheets. The polyethylene materials produced by the polymers industry possess certain qualities and properties that make them easily usable. According to Ukpong (2011), polythene materials are reproducible and predictable due to their high physical strength, as well as their ability to withstand mechanical stress for a long period of time, which can lead to environmental pollution in Nigeria.

The geographical area of Nigeria, which is part of the geopolitical zones of Nigeria, is the focus of this study due to its proximity to the country's economic mainstream. This area is confronted with environmental issues due to oil exploration, waste, polythene materials, and other sources of pollution. Polythene is a non-biodegradable material that can persist in water and soil over a long period of time, with Liu (2010) noting that it can withstand mechanical stress for up to 40 years. Furthermore, polythene is not a productive material for the soil, and polythene dumps are a common practice in the area. These dumped polythene products release harmful toxins into the air, including POPs such as dioxins, which can pose a threat to air quality. Abanyam (2019) and Aziegbe (2017) report on the environmental pollution caused by polythene in and around cities.

Furthermore, stakeholders in Nigeria are concerned about the contamination of the water supply in this area by polythene waste, which is present in the form of gases, sludge, and solid. This waste has had a detrimental effect on both surface and underground water, as it has destabilized the properties of water. This has had a negative impact on the temperature, taste, smell, colouring, turbidity, the number of suspended solids in the water, and the electrical conductivity of the water. Furthermore, fish and other marine organisms in the water ways have been observed to mistakenly ingest polythene material, leading to their death. This has raised the interest of stakeholders in this area, particularly in order to maintain an environmentally friendly, healthy, and clean water supply.

The researchers identified polythene production companies as one of the primary contributors to environmental degradation in Southern Nigeria. This could be due to environmental pollution, product waste, or the inability to recycle uncontaminated polythene. According to Fernando (2014), the spread of non-reusable polythene items by consumers in landfills has been a contributing factor to the degradation of the environment. Despite consumers' attitude towards improper disposal, polythene manufacturers must adopt eco-friendly marketing practices to reduce the amount of waste generated from their products. This can be achieved through waste minimization practices, such as the maintenance of appropriate waste disposal, recovering, converting, controlling and reusing methods. This can be done by incorporating an eco-friendly pricing and promotion framework into the overall green marketing strategy to ensure consumer sustainability.

Therefore, this study sought to determine the green price and promotional frameworks that polythene producing companies must have in order to ensure consumer sustainability in Nigeria. Hence, the main focus of the study was to answer the following questions: what is the green pricing strategy of polythene manufacturers to ensure sustainable consumption in Nigeria and how do polythene manufacturers achieve sustainable promotion in Nigeria? Based on this, we propose the following: 1. There is no meaningful difference in the average ratings of responses from marketing lecturers to consumers regarding the green pricing practices of polythene companies in Nigeria to achieve sustainable consumption; and 2. There is no relevant difference between the average ratings from marketing lecturers, to managers and consumers regarding the green promotion practices that polythene companies have for achieving sustainable consumption. The next section discusses about sustainable consumption, green pricing and green promotion in more detail.

LITERATURE REVIEW

Sustainable Consumption

Consumer sustainability, according to Abanyam and Uwameiye (2019), refers to the simultaneous optimization of the environmental, social, and economic consequences of acquisition, use and disposition of polythene products in order to meet the needs of both current and future generations. Sustainable consumption has become a core objective recently in both national and international arenas, and one of the biggest factors of change for individual consumers, is the call to save the planet by purchasing recycled goods and demanding ethically produced products from companies (Abanyam & Onimawo, 2020; Phipps, Ozanne, Luchs, Subrahmanyan, Kapitan, Catlin, Gau, Walker Naylor, Rose, Simpson & Weaver, 2012). This concept has become increasingly popular in recent years, both domestically and internationally. It is the goal of consumers to purchase products from companies that are ethically produced, with the aim of reducing environmental, social and economic impacts. Companies that take sustainability into account in their marketing strategies are considered to have a competitive

edge over those that do not (Biloslavo & Trnavcevic, 2009; Jones, Clarke-Hill, Comfort, & Hillie, 2008). Therefore, adopting green marketing strategies in terms of pricing and promotion can open up new business opportunities and provide a strong potential for profit, while also satisfying stakeholders who have a significant influence on the success of the company.

Green Pricing

Green pricing practices refer to the steps that polythene manufacturers can take to determine the monetary value that a customer is willing to pay for a product made from green polythene. According to Singh and Pandey (2012), the majority of consumers will only be willing to pay more if there is a perceived additional value to the product, such as enhanced performance, functionality, design, visual attractiveness, or taste. Therefore, these are essential elements to incorporate into green pricing practices. Environmental benefits alone are not sufficient to justify higher prices. To generate sales and profit, it is not sufficient for a business to sell good products at reasonable prices. The benefits of organic polythene products must be conveyed to customers through a blend of promotion mix.

Despite the presence of green products in the South-South of Nigeria, many consumers are still unable to accept the high costs associated with these products. This is due to their resistance to the high prices charged for the new products, leading to sales barriers for these products. Research has revealed that the reasons for consumers' reluctance to purchase green products may include poor pricing such as those identified by Silvia and Maria (2020), Hua (2020), Xu et al. (2020), Wang et al. (2017), Bao (2017), and Chekima (2016). Therefore, if the demand for green marketing practices in Nigeria is to be sustained, it is essential to identify the green price and promotion frameworks necessary for achieving this philosophy.

Green Promotion

Green promotion practices refer to communications intended to inform stakeholders of a company's commitment, efforts, and successes in the field of environmental protection (Dahstrultrom, 2011). A green polythene promotion practice is a combination of sales promotions, advertising, public relations, and personal selling intended to communicate to the target audience the environmental, social and economic advantages of the use of polythene products made from green materials. Polythene manufacturers can demonstrate their commitment to environmental protection through various promotion practices. According to Menon (2009), green promotion practices, such as green advertising, sales promotions, publicity, and the inclusion of environmental statements on product packaging, help to maintain a constant demand for the product and position it among the target market.

Many studies have been conducted about green marketing mix such as Nataliya and Nuvriasari (2023), Siuda (2022), and Abanyam and Abanyam (2021). However, there is scant evidence that linked green promotion with sustainable consumption particularly in the Nigerian market despite the rising significance of environmental marketing in consumer markets (Leonidou et al., 2011). In addition, there is a limited understanding of which green promotion strategies are required to achieve sustainable consumption based on the perspectives of academics, managers and consumers. Therefore, the next section will discuss the methods adopted by the researchers to bridge the gap in the current literature.

METHODS

Design of the Study

The study adopted an embedded type of mixed method design. An embedded design of mixed methods, according to Tegan (2022), involves the collection and analysis of both quantitative and qualitative types of data at the same time, but within a larger quantitative or qualitative design. Hence, one type of data is secondary to the other. This design was considered suitable because the researchers made use of both the quantitative and qualitative types of data in drawing conclusion for the study.

This research was conducted in the six states of Nigeria. Nigeria is made up of six states as follows: Cross River, Akwa Ibom, Delta, Edo, Rivers, and Bayelsa State. The zone is bordered on the East by South-East Nigeria, on the West by South-West Nigeria, on the Northby-North Central Nigeria, and on the South by the Atlantic Ocean. The zone is lying between latitudes 4°32¹ and 5°33¹ North, and longitudes 7°25¹ and 8°25¹ East, and it is characterized by a humid tropical climate, with an air temperature between 26°c and 28°c, and a relative humidity of between 75 and 95 percent. The annual rainfall is about 2,400mm in average, and the rainfall pattern is bimodal, that is, having two forms with the usual "August break" around mid-August and September ending during the rainy season. Nigeria is a polythene manufacturing country with many companies involved in producing indomitable polythene for various uses. This indomitable polythene causes a lot of environmental concerns considering the fact that the south-south is surrounded by a lot of water. The constant dumping of indominitious polythene waste into land-fills contributes to the degradation and pollution of the environment. This includes gorges, soil, water & air pollution and blocking of drains & sewage lines in & around cities. This practice poses a serious threat to life & properties when there is flooding which is a common occurrence in this zone. The timely adoption of green ethical, pricing, promotion, staff training, distribution & physical evidence practices by the polythene manufacturers, including the recycling of used polythene product will go a long way in reducing the environmental impact on the people of Nigeria. This zone was chosen for this study because of the homogeneity of the people's culture. This helped achieve uniformity of the responses of the respondents on greening the pricing and promotion practices. Furthermore, the researchers are familiar with this zone so it made it easy to collect data.

Participants for the Study

The population for this study is 323 people, 35 of which are Marketing Lecturers. 60 of them are Polythene Manufacturing Company Managers and 228 of them are Registered Table Water Producer in Nigeria. The population of Marketing Lecturers is sourced from Personnel Department of Universities Calabar, Uyo, Port Harcourt, Benin. These universities offer marketing programmers and as such, have Marketing Lecturers who teach marketing courses. For the population of Managers of Polythene Manufacturing companies, we sourced from Manufacturing Association of Nigerian (MAN), while for the population of Polythene Consumers, were sourced from the registered Members of Table Water Association in the six States of Nigeria. For this study, the researchers managed to meet all 228 registered Table water Producers at their Annual General Meeting.

The selection of these lecturers was based on their knowledge and skills in teaching and their advocacy for consumers' friendly marketing practices including green marketing. Polythene manufacturing company managers were also selected for this study as they are the first to implement green marketing practices that need to be discussed in this work and as such,

they are the direct recipients of the study. Table Water Producers, on the other hand, are chosen to represent polythene consumers because they have a well-organized association which improves the data collection. They were also selected as they are the intermediaries that link polythene producers and final consumers. Therefore, they are better able to provide the information needed to validate this study. The entire population was included in the study as it was a manageable size.

Instruments

The instruments used for the data collection were a researcher-developed questionnaire and a discussion in a focus group. The questionnaire, referred to as the "Green pricing and promotion framework for the achievement of sustainable consumption by polythene Companies", was divided into two parts: Part A, which asked for biographic data, and Part B, which asked for information on green pricing practices. Part A had 18 items, while Part B had 18 items, both asking for information on green promotion practices. The components of the questionnaire were divided into sections I and II, each of which had four points on a scale of very highly required (VHR-4), highly required (HR-3), slightly required (SR-2) and not required (NR-1).

In order to further refine the qualitative data, a Focus Group Discussion (FGD) was employed to facilitate the discussion. The participants used for the FGD were Marketing Lecturers and workers in Polythene Manufacturing Companies and Table Water Factories. The study divided into six groups, one from each of Nigeria's six states in the South-South region. Each group included five discussants recruited from the population. Abanyam et al. (2020) describe the FGD as an informal interview hosted by a moderator among a small group of participants in a natural manner, allowing them to express their opinions on various subjects of interest. Utilizing the FGD for this study would have provided reliable data for generalization.

Following the verification of the instruments by the five experts, the Cronbach alpha reliability methodology was employed to ascertain the internal coherence of the questionnaire entries. The questionnaire was designed for a sample of 30 respondents, consisting of 5 Marketing Lecturers; 10 Managers of Polythene Manufacturers; and 15 Polythene Consumers in the State of Anambra. The reliability analysis revealed a coefficient of 0.83 for Section I and 0.62 in Section II. The overall reliability of the instrument was established at 0.89, demonstrating the robustness of the questionnaire.

Data Administration and Analysis

In order to administer the questionnaire directly to respondents, five research assistants were recruited. The assistants were selected based on their familiarity with the study area and their ability to manage the administration of the questionnaire and the return rate. The total number of questionnaire copies distributed to respondents was three hundred twenty-three (323). The total number of copies retrieved from respondents was three hundred eighteen (318), with a return rate of 98.5%. The descriptive statistics used were the mean and standard deviation of the answers to the research questions. The ANOVA (Analytical of Variance) statistic was tested for the null hypothesis of non-significant difference at a probability value (P < 0.05) of 0.005 at 317Df. The statistical package for social sciences, SPSS version 20, was used for the analysis.

In the decision rule, the real limit of number (RLN) was used to interpret the data for the following answers to the research questions: VHR (Very High Requirement): 3.50–4.0; HR (High Requirement) 2.50–3.49; SR (Slight Requirement) 1.50–2.49; and NR (Non-

Requirement) 1.00–1.49. The cut off mark was 1.96. On the basis of Fisher's rule, as discussed in Abanyam, Nwokedi and Agbomi (2022), a standard deviation lower than or near 1.96 indicated that the respondents' opinions were close to the average and to each other; however, a standard deviation higher than 1.96 suggested that the respondents' views were not close to either the mean or to one another.

The test of hypotheses did not reject a hypothesis with no significant difference when the probability value was greater than 0.05; however, a null hypothesis was rejected if the probability value was lower than 0.05. Post-hoc analysis was conducted to identify the source of the difference where the test of hypothesis revealed a significant difference.

The FGD sessions were moderated by the researchers personally in order to generate qualitative data. As tape recorders and other electronic devices were not allowed to be used to record, videotape or take images, the researcher and his two research assistants simply jotted down the discussions as they took place. At the conclusion of each FGD session, the researcher checked the written information received to ensure that the respondents were not misrepresenting the facts regarding the subject matter of the study. Qualitative data generated from FGD were reported and summarized as provided by respondents. These qualitative data would assist in validating or invalidating the quantitative data obtained.

RESULTS

The quantitative data generated for this study were statistically analyzed and presented in line with the research questions and hypotheses. Also, to ensure data triangulation, the responses from the FGD were analyzed in this section.

Quantitative Path

Table 1: Mean ratings of respondents on green pricing practices for polythene companies to achieve sustainable consumption in Nigeria

S/No	Items Statement	$\bar{\mathbf{X}}$	SD	Dec
1	Decide upon the green pricing objectives before	3.55	.56	VHR
	determining the price itself			
2	Conduct market research to establish what optimum price	3.49	.70	HR
	customers would be willing to pay for a green polythene product			
3	Minimize price barrier by bringing the price point for a	3.22	.77	HR
	green polythene closer to the reach of the consumers			
4	Minimize green polythene pricing barriers through flexible	3.25	.80	HR
	marketing efforts to raise the perceived value to command			
_	a premium	2 22	76	IID
5	Adopt competitors'-oriented pricing practice in making green polythene available to consumers	3.33	.76	HR
6	Use green markup pricing to cover for anticipated	3.23	.68	HR
	operating cost			
7	Set prices below what competitors are charging for green	3.25	.73	HR
	polythene products			
8	Use anticipated price levels of competitors as primary	3.28	.75	HR
	source for setting prices for green polythene products			

9	Forecast market situation to outclass competitors' prices	3.37	.64	HR
10	for green polythene product Set a green price for a polythene product using the prevailing market price as a basis	3.28	.70	HR
11	Offer price discount to green polythene consumers who comply with environmental standards	3.31	.66	HR
12	Encourage price reduction for green polythene customers from rural areas	3.34	.63	HR
13	Utilize online participative green pricing mechanisms for online polythene buyers	3.36	.67	HR
14	Retain market share through green transactional pricing practices for consumers who comply with green standards	3.37	.67	HR
15	Increase market share through penetrative pricing practices to ensure high demand for green polythene products	3.34	.66	HR
16	Match company's pricing offer with market demands for green polythene products	3.31	.72	HR
17	Create a balance between higher profits and concern for the environment when fixing green polythene prices	3.18	.75	HR
18	Use net sales estimation on green polythene to achieve target return on investment	3.16	.79	HR
	Grand mean	3.31	.31	HR

Key N=318; X= Mean, SD= Standard Deviation, Dec. = Decision, HR = Highly Required, VHR = Very Highly Required

Table 1 shows that item 1 has a mean score of (3.55) indicating very high demand, whereas items 2 to (18) have mean ratings of (3.16) to (3.49) indicating high demand. The standard deviations range from (0.56) to (0.80), which is lower than the mean score of (1.96). This indicates that the respondents are not too far apart or close to one another in terms of their opinion. In Table 2, the grand mean score is (3.31) and the standard deviation is (0.31). Therefore, all the items in Table 1 demonstrate that green pricing practices are highly desired by polythene companies in order to achieve sustainability in Nigeria.

Table 1 shows that all 18 items listed are green pricing strategies for polythene companies in order to meet sustainable consumption requirements in Nigeria.

Table 2: Analysis of variance of the mean responses of marketing lecturers, managers and consumers on green pricing practices for polythene companies to achieve sustainable consumption in Nigeria

Source of square	Sum of square	Df	Mean- square	F-ratio	P-value (sig)	Remark
Between groups	.89	2	.44	4.72		
Within groups	29.57	315	.09		0.01	S
Total	30.46	317				

Key: S= *Significant*

The results of Table 2 demonstrate that the F-value is 4.72 and the P-value is 0.01 at 317 DFS, which is below the level of significance of 0.05. This suggests that there is an appreciable difference between the average responses of marketing lecturers, managers, and consumers to the green pricing frameworks for achieving sustainable consumption by polythene companies

to in Nigeria, thus rejecting the null hypothesis. Subsequently, a post-hoc analysis test was conducted using the Bon Ferroni multiple comparison method to identify the source of the difference.

Table 3: Post-hoc analysis test for comparing the mean ratings of marketing lecturers, managers, and consumers on the green pricing practices for polythene companies to achieve sustainable consumption in Nigeria

S/n	(I) marketing	(J) marketing	Mean	Std.	Sig	Remarks
5/11	stakeholders	stakeholders	Difference	Error	value	Kemai Ks
	stakenoluers	(ompared)	(I-J)	LIIUI	value	
		Polythene Managers	05163	.06517	1.000	NS
1	Marketing Lecturers					
		Polythene Consumers	.07883	.05571	.474	NS
		Marketing Lecturers	.05163	.06517	1.000	
2	Polythene Managers					
		Polythene Consumers	.13046*	.04456	.011	S
		Marketing Lecturers	07883	.05571	.47	NS
3	Polythene Consumers					
		Polythene Managers	13046*	.04456	.01	S

The post-hoc analysis of table 3 revealed that the mean ratings of marketing lecturers and polythene consumers were in agreement regarding the green pricing frameworks needed by polythene companies to achieve sustainable consumption in Nigeria. The post-hoc analysis result indicated a probability value of 1.00 (more than 0.05) and 0.47 (less than 0.05). However, the mean ratings of polythene consumers and polythene lecturers were significantly different from those of polythene managers, with a probability value of 0.01 (less than 0.05). This indicates that the source of the difference lies between polythene consumer and polythene manager. The results are presented in Figure 1.

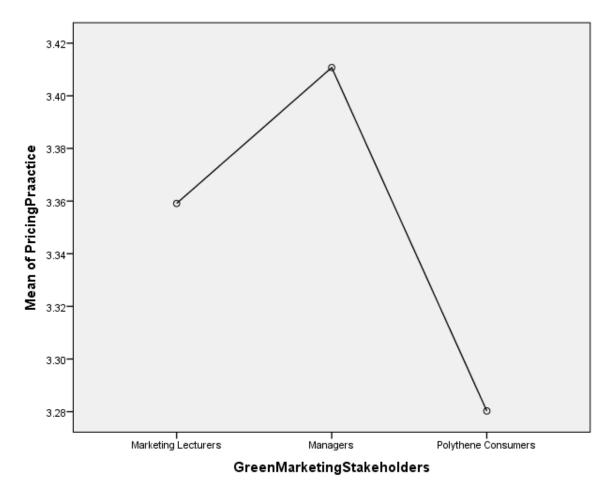


Figure 1: Mean plots of marketing lecturers, managers, and consumers on the green pricing practices for polythene companies to achieve sustainable consumption in Nigeria

Table 4: Mean ratings of respondents on green promotion practices for polythene companies to achieve sustainable consumption in Nigeria

S/No	Items Statement	$\bar{\mathbf{X}}$	SD	Dec
1	Utilize adverts that promote the awareness of green polythene	2.53	1.24	HR
2	Enhance consumer environmental awareness on the benefit of consuming green polythene products	3.23	.73	HR
3	Provide all necessary information about a green polythene product to consumers at all times	3.36	.63	HR
4	Use jingles to promote company's reputation to attract larger customers base	3.34	.66	HR
5	Use crested green materials to promote company environmental credentials	2.75	.89	HR
6	Use words of mouth to promote green polythene products manner to ensure business credibility	3.36	.86	HR
7	Use green messages to inform consumers on the benefits of green polythene product	3.10	.87	HR
8	Advertise green polythene initiatives effectively to acquire a greater market share	3.42	.73	HR

9	Choose communication devices with minimal impact on	3.22	.85	HR
	the environment to promote green polythene			
10	Use billboards to communicate resource preservation at all	3.34	.73	HR
1.1	stages of the value chain	2.42	60	IID
11	Invest in green polythene promotional research and	3.43	.69	HR
12	development initiatives Integrate green promotion into the marketing policies to	3.40	.77	HR
12	ensure green polythene products delivery	3.40	.,,	TIIX
13	Use direct marketing practice to promote positive social	3.59	.66	VHR
	responsibility image			
14	Ensure customer awareness of personal health risks of not	3.51	.75	VHR
	using green polythene products			
15	Use sales promotion tools to promote environmentally	3.31	.92	HR
1.6	friendly green polythene products to the consumers	2 47	60	IID
16	Use publicity to depict an environmentally friendly business image to all stakeholders	3.47	.60	HR
17	Use public relation mix to educate consumers on the	3.40	.64	HR
	benefits of green polythene product			
18	Use online platforms to create awareness of green	3.31	.81	HR
	polythene products			
	Grand mean	3.28	.23	HR

N = 318

Table 5: Analysis of variance of the mean responses of marketing lecturers, managers and consumers on green promotion practices for polythene companies to achieve sustainable consumption in Nigeria

Source of square	Sum of	Df	Mean-	F-ratio	P-value (sig)	Remark
	square		square			
Between groups	.19	2	.09	1.80	.18	
Within groups	16.34	315	.052			NS
Total	16.53	317				

Key: NS = Not Significant

The ANOVA test conducted by Table 5 revealed that there was no meaningful difference in the average responses of marketing lecturers, managers and consumers to the green promotions practices for polythene companies to achieve sustainable consumption in Nigeria. The results of Table 4 demonstrate that the F-value was 1.80 and the P-value was 0.18 at 317 degrees of freedom, which is significantly higher than the .05 threshold, thus confirming the null hypothesis that there was no significant difference. This data is illustrated in Figure 2.

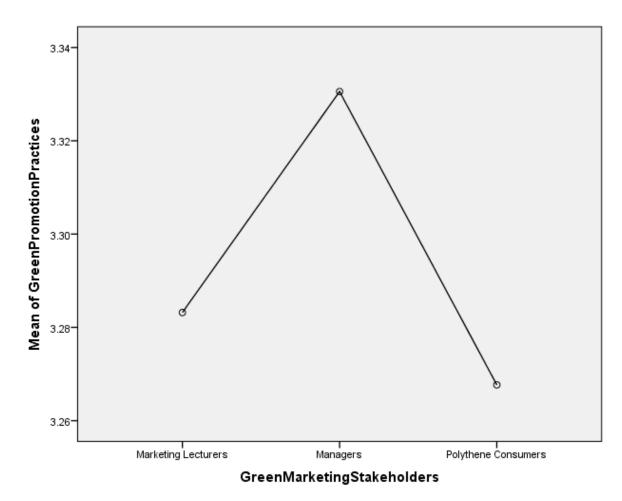


Figure 2: Mean plots of marketing lecturers, managers, and consumers on the green promotion practices for polythene companies to achieve sustainable consumption in Nigeria

Qualitative Path

The qualitative data obtained from the respondents was carried out via the use of focused group discussion sessions based on the greening pricing and promotion practices required by polythene manufacturers. Their positions are summarized in Table 6:

Table 6: Qualitative data extracts from the FGD sessions

S/No	Variables	Examples from the FGD extracts
1	Greening the pricing practices	"actually, green marketing is ideal due to its ecological significance. However, these green products are usually very expensive to manufacture, since we are business to make profit, would the consumers be willing to pay extra for our greening practices > if yes, then from my experience in the field, the following practices should be encouraged: the company must first of ajj decide on the green pricing model to adopt, which I believe yours be better for us considering level of inputs from stakeholders; ensure green price barriers are completely eliminated by bringing the price point for a green polythene closer to the reach of the consumers; and

		with a discounted green pricing penetration practice, then you are good to go"
2	Greening the promotion practices	"we feel that engaging adverts that promote the awareness of green polythene as well as enhance consumer environmental awareness on the benefit of consuming green polythene products

The focus group discussions on the green pricing practices by the researcher also showed that the price reduction strategies should be supported by customers if they want to buy green polythene as green products tend to be more expensive. Therefore, the tax breaks provided by the government will contribute to green price reduction strategies. This point of view as presented by polythene manufacturers added more credibility to quantitative data. This also helps to strengthen the reliability of data collected to answer research question 1.

Table 4 shows that all 18 items listed in the table are green promotion practices which polythene manufacturers require to promote consumer sustainability in Nigeria.

Furthermore, the focus group discussions on green promotion practices by the researcher also showed that word of mouth promotion, sales promotion, promotion and advertising are required promotion practices to promote polythene products in green marketing. The polythene manufacturers' views on green promotion practices added more credibility to quantitative data. This helps to improve the reliability of the collected data to answer research question 2.

DISCUSSION

The findings of the study are discussed in subheads, in line with the specific purposes of the study and hypotheses as follow:

Green Pricing Practices

The study identified a number of key factors that should be taken into consideration when determining the optimal price for a green polyethylene product: determining what customers are willing to pay before establishing a value for the product; reducing the price point for the product by bringing it closer to the consumer; minimizing the cost barriers associated with green polythene by utilizing flexible marketing strategies to increase the perceived value to generate a premium; adhering to competitors' pricing practice in providing green polythene to the consumer; utilizing green markup pricing to account for anticipated operating costs; setting prices below what is being charged by competitors for their green polyethylene products; utilizing anticipated price levels from competitors as the primary source for setting the prices for green polyethene products; utilizing green pricing practices for the purpose of achieving sustainable consumption in Nigeria. The results of this study support the findings of Abanyam (2019), and Lamb, Hair, and McDaniel (2014), which indicated that a successful green pricing practice necessitates the ability to achieve profit targets, match or exceed competitors' prices, maintain or gain market share, align the company's offer with market demand and align with the company's image or reputation. Adopting such green pricing practices from polythene manufacturers would stimulate consumer demand for green products due to the fact that green products are typically more expensive in the short term.

By conducting market research, we identified a number of green pricing practices that polythene manufacturers in Nigeria are required to adhere to in order to ensure consumer

sustainability. These practices include offering price discounts to customers who meet environmental standards, reducing the cost of polythene products for consumers in rural areas, utilizing online participatory pricing mechanisms to attract virtual consumers, and utilizing net sales estimation strategies for return on investment. This confirms the assertion made by Lancaster et al. (2012) that organizations may attempt to compete with each other by reducing prices, or even by adopting what is known as "follow the leader" policy, whereby companies price their products based on their competitors' prices. While few businesses have failed due to their high prices, many have folded due to their inability to cover costs or make a profit. Consequently, the price of the product must be found to be between the "too low" and "too high" ranges.

It was observed that there was a considerable disparity between the average responses of marketing lecturers, managers, and consumers regarding the green pricing policies of polythene companies in Nigeria in order to attain sustainable consumption. The cause of this discrepancy was found to be between polythene consumers and polythene managers. The difference between the polythene manager's opinion and the responses of marketing lecturers and polythene consumers can be attributed to the fact that the latter are in business for profit, thus they are more likely to accept prices that will lead to an increase in their revenue; whereas, the marketing lecturers and consumers are both on the receiving end of the price reductions.

Green Promotion Practices

The study concluded that the use of advertisements that promote the awareness of organic polythene, the promotion of consumer environmental awareness of the advantages of consuming organic polythene products, and the provision of all relevant information to consumers regarding the organic polythene product at all times are all green promotion practices for the purpose of achieving sustainable consumption in Nigeria by polythene companies. This conclusion is in line with Wagner and Hansen's (2012) suggestion that green advertisement should emphasize the overall value of the product, particularly in relation to functional product benefits, which often necessitates a certain degree of consumer education.

This study found that jingles are used to promote a company's reputation and attract a larger customer base; crested green materials are used to promote the company's environmental credentials; words of mouth are used to promote green polythene products in a manner that ensures business credibility; green messages are used to inform consumers of the benefits of the green polythene product; and green polythene initiatives are advertised effectively to gain a greater market share. These are all green promotion practices that polythene manufacturers in Nigeria require in order to ensure consumer sustainability. Furthermore, the findings of this study are in line with the practices identified by Young (2015), who stated that green advertising should include four main activities: objective setting; budgeting; message strategy; media practice; and three necessary practices, such as carefully evaluating customer behavior related to the brand; thoroughly evaluating the competition; and coordinating the proposed advertising program with the overall marketing practices of the brand.

The hypothesis that there is no significant difference between the responses of the marketing lecturers and managers, as well as consumers, was not confirmed by the findings of the study. As a result, all respondents to the study agreed that the eighteen green promotion practices that were identified are highly necessary for a polythene company to reach sustainable consumption levels in Nigeria.

CONCLUSIONS

This study examines the various green marketing practices that polythene manufacturers and consumers in Nigeria can adopt in order to promote sustainable consumption. The degradation of the environment is largely due to the failure of polythene producers and consumers to effectively manage waste from the production of polythene. Nevertheless, the findings of the study reveal a number of green marketing practices that can be adopted by manufacturers and consumers alike. These practices include, but are not limited to, green pricing and promotional practices. Adopting these green marketing practices in the promotion and marketing of organic polythene will not only have a positive impact on the environment, but also on the sustainability of consumers and their consumption of the products.

Based on the results, discussions and conclusions of this study, we recommend the following: 1. Implement green pricing practices by reducing price barriers, polythene manufacturers can bring the price point in line with their conventional counterparts or by marketing efforts to increase the perceived value and command a premium price. 2. Use rational and emotive appeals to influence consumers' beliefs, attitudes, and behaviour related to green marketing practices.

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