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ENVIRONMENTAL RESPONSIBILITY AND MARKETING SUCCESS OF OIL AND GAS INDUSTRY IN SOUTH SOUTH, NIGERIA

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ABSTRACT

This paper examined the relationship between environmental responsibility and marketing success in oil and gas industry in South South, Nigeria. The study adopted quasi-experimental research design. 301 copies of questionnaire distributed and 283 were valid. The Spearman Rank Order Correlation Coefficient was used with the aid of Statistical Package for Social Sciences (SPSS version 23.0), discriminant validity (AVE) and Cronbach Alpha verified the internal consistency and validity status and the results were positive. The findings of the study showed that ER significantly related with marketing success in oil and gas industry, thus enhancing profitability, market share and sales volume. Based on the findings, the study, recommends that, Government should also play its part in encouraging in development and production of environmental friendly and efficient products. Oil and gas firms should invest and develop more on eco-practices, in order to have a bigger impact on the market, and emerge as being environmentally conscious organization and giving more attention to environmentally conscious customers who take an active role in protecting it.

KEYWORDS

Environmental Responsibility, Marketing Success, Oil and Gas Industry.



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1.0 Introduction

Oil and gas industries has provided so many derivatives such as; Kerosene, fuel, diesel, aviation fuel, asphalt and intermediate products that are useful to man's daily life (NNPC group Com, 2019). The South-South States, prior to the activities of oil and gas, had abundant of crude. However, the South-South States of Nigeria has been engulfed in a crisis of instability caused by protesting oil producing communities against environmental degradation, palpable poverty, lack of basic social amenities and employment opportunities. Environmental issues have become major concern for any organizations (oil and gas industry inclusive) and nations that strive to succeed in the face of dynamic and stiff competition. Over the last decade, environmental responsibility has emerged to be a vital organizational movement due to increasing concerns related to acid rains, depletion of the ozone layer, and degradation of the land, sea, air and many more pressing environmental problems (Ayodele, et al., 2017). As growing awareness about the implications of global warming, non-biodegradable solid waste, harmful impact of pollutants etc., both marketers, consumers and host communities of these oil and gas firms especially in South-South States of Nigeria are becoming increasingly sensitive to the need for the switch into environmentalism and degradation of the ecosystem caused by their activities as highlighted in Ayodele, et al. (2017).

The increase in global environmental awareness and the campaign for sustainable national (economic) development is redirecting the attention of oil and gas firms towards environmental sensitivity. The quest for marketing success has caused an emergence of many local and international oil and gas firms enunciating varying norms that guide human interaction and friendliness with the environment. These standards are influencing business corporations to understand that their strategic position in the society has the power to affect consumer behaviour and alter their state of physical, social and economic environment. At various national levels are government regulations, society pressure groups and green consumer pressure; these developments are revitalizing corporate attention to strategic and competitive role of environmental responsibility to corporate survival (Ayodele, et al., 2017). Many corporations in developing countries such as Nigeria behave in a manner that suggests they can achieve corporate goal even if environmental and social responsibility are trampled upon. In addition, environmental responsibility of these firms is assessed against expenditure for fines and penalties to ascertain the extent which environmental responsibility is able to reduce conflict between the firm and its business environment (Obi, 2015).

Many business enterprises do behave in a manner that suggests they can accomplish enterprise goal even if environmental responsibility (ER) are trampled upon. In addition, ER of these oil and gas enterprises is assessed against expenditure for fines and penalties to establish the extent which it is able to reduce conflict between the business enterprise and its environment. Three sustainable indicators are used as a quantifier of ER, namely: Employee health and safety (EHS), Waste Management (WM), and national (community) development (ND), which were identified within the environmentally responsible firms. Expenditures for these sustainable indicators are related against measure of marketing success such as profitability, market share and sales volume used in this study. In addition, the sustainable variables are also related against the amount expended on fines, penalties and compensations (FPC). According to the American Marketing Association (AMA), ER can be defined in three different ways: Firstly, ER is the marketing of products/services that are supposed to be environmentally safe (that is a Retailing Definition). Secondly, ER is the development and marketing of products/services designed to lessen the negative effects on the physical environment on which human lived on or to improve its quality (from the perspective of Social Marketing Definition). Thirdly, ER is the efforts by organizations to produce, promote, package, and reclaim products in a manner that it is very sensitive or responsive to the environmental concerns (taking from the view of Environmental Definition). ER is defined as the process of producing and selling of products based on their environmental concern benefits and such products must be eco-friendly in nature. This current study defines ER as the marketing efforts channelled towards increasing environmental consciousness.

The concept of ER simply means a move towards improving and protecting natural environment from hazard for better and healthy living of consumers and the society. Polonsky (2011) stated that the practice of ER aims not only to improve the quality of environment but also the quality of human and other animals life to ensure that business practices does not cause any form of havoc. Environmental responsibility is an idea that strives to satisfy "environment-conscious" customers by promoting goods and services that do not produce considerable

harm to them and the environment. It calls for the need to differentiate and recognized the “green consumers” and to focus all marketing activities toward reaching the expectations and demands of the population (Banyte et al., 2010). Chamorro and Bañegil (2006) stated that the objective of the ER is to minimize the negative impact of products production and distribution on the natural environment especially during the process of planning and implementations of products or services, price, place and promotion. Also Mourad and Ahmed (2012) points out that the goal for ER is to make profit and at the same maintain the social responsibility towards the environmental health of the society.

An immeasurable literature currently exists on environmental policy in both the domestic and international contexts (e.g., Hattori, 2017; Pal, 2012; Petrakis & Xepapadeas, 2003; Takashima, 2018; Yong et al., 2018 and others). On the other hand, in the last few decades, the lack of credibility of environmental regulation and policy timing have been discussed (e.g., Abrego & Perroni, 2002; Brunner et al., 2012; Moner-Colonques & Rubio, 2016; Ouchida & Goto, 2014, 2016b). As a result, recent studies show that the socially desirable timing of government decision-making and firms’ investment in environmental R&D depends on the regulatory environment. Furthermore, although many oil and gas firms adopt ER relatively few studies incorporate CSR into the emission regulation model (see, e.g., Garcia et al., 2018; Lambertini&Tampieri, 2015; Nie et al., 2019; Xu& Lee, 2018; and others).

It is against this backdrop, the study sought to investigate the influence of environmental responsibility on marketing success of oil and gas industry in South-South, Nigeria.

1.1 Problem Statement

In South-South, Nigeria, a lot of energy is wasted because households, public and private offices and industries use more energy than is actually necessary to fulfill their needs. One of the reasons is that they use old and inefficient equipment and production processes. The other reasons are unwholesome practices that lead to energy wastage. One of the major sources of environmental degradation in Nigeria comes from oil and gas firms either inform of environmental pollution, spillage or waste from the product or product packages. The process of oil exploration, leading to gas flaring, oil spillage, crop and aquatic environment destruction as a result of careless abandon which the oil companies have adopted as a method, is the major cause of agitation by the host communities of oil companies.

Evidence had shown in the extant literatures (Haruna&Kamariah, 2015; Noushan& Syed, 2015; Muhammad et al., 2014; Irawan & Darmayanti, 2012) that influential factors such as concern for environment, social influence, brand strength and green regulations influences national development in a more energy efficient manner through the purchase of environmentally-friendly products in Nigeria. More so, these studies are alien to a typical developing economy like Nigeria, therefore it is urgent and legitimate to carry out a context specific study on the subject matter. It is against this backdrop that this study analyzed the effect of environmental responsibility on marketing success of oil and gas industry in South-South, Nigeria.

1.2 Research Objectives

The broad aim of this paper is to investigate the effects of environmental responsibility on marketing success of oil and gas industry in South-South, Nigeria. The specific objectives were as follows;

- a. To determine the effect of environmental responsibility on profitability.
- b. To ascertain the effect of environmental responsibility on market share.
- c. To find out the effect of environmental responsibility on sales volume.

2.0 Literature Review

2.1 Theoretical Foundations

2.1.1 Ecological Modernization Theory: The proponent of Ecological Modernization theory has provided the rational theory for environmental entrepreneur (Hajer, 1995; Mol, 1995). According to the theory, it is possible to promote economic growth by giving higher priority to the environment of which the enterprise activities are done. It is no longer necessary to trade off economic growth for environmental quality (Young et al., 2009). The capitalist system is seen as having the capacity to develop sustainable solutions to environmental degradation.

That capitalist drive for innovation can be harnessed to produce environmental improvements for the well-being of the inhabitants (Beveridge & Gug, 2005). Ecological modernization theorist believes that “the environmental problems facing the world today, act as a driving force for future industrial activity and economic development” (Murphy, 2000). Enterprises and entrepreneurs are the central agents of change in that process of transformation to avoid an ecological crisis (Gibbs, 2009; Young et al., 2009). Oil and gas industry have the potential to be a major force in the overall transition towards a more sustainable business paradigm (Schaper, 2002).

The justification for using this theory is that, ecological modernization theorist believes that “the environmental problems facing the world today, act as a driving force for future enterprise activity and economic development”. The theory also believes that it is possible to promote economic growth by giving higher priority to the environment and other eco-agents. It is no longer necessary to trade off economic growth for environmental quality. This theory has served as a morale booster for oil and gas firms. This theory has given credence to the study of corporate social responsibility.

2.2 Conceptual Review

2.2.1 Environmental Responsibility (ER)

Environmental responsibility has become major concern for any enterprises and State of the nations that make every effort to succeed in the face of dynamic and stiff competition. Over the decades, ER has emerged to be a fundamental enterprise movement due to increasing issues related to acid rains, depletion of the ozone layer, and degradation of the land and many more pressing environmental concern issues (Tsaenko et al., 2013). As growing awareness about the implications of global warming, non-biodegradable solid waste, harmful impact of pollutants etc., both marketers and consumers are becoming increasingly susceptible to the need for the switch into environmental friendly products and services (Tsaenko et al., 2013). The increase in global environmental awareness and the campaign for sustainable national (economic) development is redirecting the thought of business establishments towards environmental understanding. The quest for sustainability has caused an emergence of many local and international business establishments enunciating varying norms that guide human friendliness with the dynamic environment. These standards are influencing business establishments to appreciate that their strategic position in the society has the clout to effect consumer behaviour and alter their state of physical, social and economic environment (Obi, 2015). At various national levels are government regulations, societal pressure groups and green consumer pressure; these developments are invigorating enterprise attention to strategic and competitive role of ER to corporate survival (Ayodele, et al., 2017). ER is defined as environmentally friendly actions not required by law; going beyond compliance, and the personal provision of public products, or voluntarily internalizing externalities (Lyon & Maxwell, 2008). ER covers a broad array of ecological and environmental objectives that can affect corporate decisions and policies (DesJardins, 1998). This entails being kind to the environment in which activities of the corporation is performed.

Environmental responsibility refers to the belief that organizations should behave in as environmentally friendly a way as possible (Searcy et al., 2015). Lee (2008) defined ER as the “degree of emotional involvement in environmental issues”. In this study, ER can be referred as the emotional involvement of the consumers in environmental issues to national development; their awareness and willingness to solve those problems within the country. Kim and Choi (2005), Padel and Foster (2005), Tsarenko et al. (2013), Nittalia, (2014), Zhao et al. (2014) reported a positive and direct impact of consumers’ ER on oil and gas purchase intention, behavior and national development. Two studies found that ER affects positively influenced national development (Chan & Lau, 2000; Kanchanapibul et al., 2014). ER was found to have a positive and direct impact on ecological knowledge, purchase intention, actual purchase behaviour and economic development (Makatouni, 2002; Padel& Foster, 2005; Wang et al., 2014; Zhao et al., 2014). An example of a firm that does not promote its environmental initiatives is Coca-Cola. They have invested large sums of money in various recycling activities, as well as having modified their packaging to minimize its environmental impact. While being concerned about the environment, Coke has not used this concern as a marketing tool. Thus many consumers may not realize that Coke is a very environmentally committed organization (Murphy, 2000). Another firm who is very environmentally responsible but does not promote this fact, at least outside the organization, is Walt Disney

World (WDW). WDW has an extensive waste management program and infrastructure in place, yet these facilities are not highlighted in their general tourist promotional activities (Murphy, 2000).

2.3 Marketing Success

To achieve success, organizations have to improve on the implementation of a proper customer service tactics. Success can be referred to as growth survival, performance and competitiveness (Dobbs & Hamilton, 2006). Marketing success may be characterized as the function of improving the process where marketers go to market with the goal of optimizing their own marketing resources spent to achieve even better results for both of the short- and long-term strategic marketing objectives (Milichovsky&Simberova, 2015). Marketing success is a measure of company success measured in a predetermined periodically as the value of activities that have been prepared and implemented to find out whether the strategies compiled and their implementation are appropriate or vice versa. Improving performance and choosing good marketing in running a business is the right way to stay ahead of the competition so that products can be known and desired by consumers. The success of marketing is very much influenced by the presence of CSR.

Often times, marketing success is used as a determinant of a firm's financial capability (Arham, 2014; Amin, 2015) and non-financial advantages such as customer satisfaction and market effectiveness (Engelen, et al., 2014; Albloshi&Nawar, 2015). Marketing success can be appreciated by either financial or non-financial measures depending on the set objectives of the corporation. Both measures have their different objectives, advantages and limitations. Financial measures are considered critical in determining the survival and success of the corporation as a result, most firms prefer to adopt financial indicators to measure their success (Zainol&Ayadurai, 2011).Marketing success uses many kinds of metrics, divided into financial and non-financial groups. From the financial point of view, marketing success could be defined as a return on investment in marketing activities in the company (Milichovsky & Simberova, 2011; Kocmanova et al., 2010).

2.3.1 Profitability: Profitability is the financial wellness and backbone of every business. Profitability is the degree to which an organization is able to manage costs and expenses in order to harness higher returns. Profitability is the total return on enterprise investments after all costs have been deducted (Kaplan & Norton, 2002). If investors believed that enterprises implementing the CSR principles are resource wasteful, they would determine a negative return premium on these companies stocks. We turn now towards the empirical evidence. Anticipating, we can say that empirical results have failed so far to capture investors' beliefs.

The primary aim of every business transaction is to make profit. Profitability can be defined as the surplus of a large number of policies and decisions (Weston & Brigham, 2001). Without profitability, the corporation will not survive in the long-run .Therefore, measuring current and past profitability is very important. Ogbadu (2004) opined that profit is usually what is left after all costs have been deducted from the accrued revenue from sales.

2.3.2 Market Share: Market share can also be referred to a percentage of a market (either units or revenue) estimated for by a particular entity. Increase in market share is one of the very important goals of business and determinant of business success. For enterprises to see how well they were doing, they compared themselves to their competitors in the industry via market share. However, business school academics have decided to support market share objectives, with the notice that higher market shares are correlated with higher profitability.

In the view of Kalu (1998), market share is the fraction a business establishment controls from the available market in an industry. It is a firm's share of the summative market in a specific sector over a given time period. The purposes of market share are prominent in many enterprises (Moghaddam & Foroughi, 2012). The marketing success and economic profit of any enterprise can be measured using market share. To achieve firm objective in terms of market share, there must be consistent improvement on firm's scale of operations (Moghaddam & Foroughi, 2012). According to Dragan (2002), market share is the representation of the ratio of the firm's overall market success, based on its revenues, profits to the total performance of the entire market served.

2.3.3 Sales Volume: Sales volume is the quantity or number of goods sold or services rendered in the normal operations of a firm in a specified period (Bassioni et al., 2004). Accordingly, Jobber and Lancaster (2000), states that the selling process is complicated by the fact that, there are usually several alternative ways by which each objective can be achieved. For instance, one can achieve an increase in revenue of 10% by increasing prices, increasing sales volume at the firm level that is market share or increasing industry sales. This illustrates how an increase in sales volume at the end of the day is expected to increase the revenue flow into to the firm. Sales volume is a type of sales quota which its advantages are easy to calculate, administer and simple to understand. Its disadvantages are; firstly, emphasis is laid only on sales volume and not on profits. Secondly, it leads to imbalances in selling activity (Jobber, 1997). According to Nobilis (2010), sales volume is seen as the core interest of every organization that is based on sales and profit. When the volume increases, all others are manageable (margin, profit, numerical distribution) but when the volume decreases, it becomes difficult to manage the business parameters. Sales does not increase or decrease on its own, the company manages and directs its sales volume through the portfolio and channels.

2.4 Empirical Review

2.4.1 Environmental Responsibility and Marketing Success

Many studies highlighted environmental CSR and its effect on customers' perceptions. Laroche et al. (2001) emphasized that the enterprise is more favourable when committing to a more ecologically friendly lifestyle and environmentally friendly practices. This is particularly true of manufacturers who undertake an environmental CSR initiative (Mohr & Webb, 2005). Marin and Ruiz (2007) claimed that there is a direct association between a customer's liking for a firm and its initiatives for engaging in CSR environment activities such as using recycled paper, pollution reduction campaigns, and other environmentally friendly steps that will positively affect the brand image (Heesup et al., 2019). Karassin and Bar-Haim (2016) in their study proposed a model of the main driving factors influencing ER as a measure of CSR. The dominant driver for environmental CSR activity is government and leaders (Dummett, 2006). Companies that adopt environmental CSR activities find them to be a key factor in their continued success, despite external challenges (e.g., Asian economic crises and competition).

Alabi and Ntukekpo (2012) studied Oil Companies and Corporate Social Responsibility in Nigeria: An Empirical Assessment of Chevron's Community Development Projects in the Niger Delta. The study, a descriptive survey assessed the CSR efforts of one of the oil companies-Chevron, in three oil communities of Niger Delta. 150 opinion leaders from three communities were purposively selected for participation in the study. Data were generated with Corporate Social Responsibility Project Assessment Instrument (CSRPAI) ($r=0.84$). The results indicate that although, the community development efforts of Chevron were actually on ground in the three communities, they were considered not satisfactory nor relevant enough to the needs of the community dwellers. Ndu and Agbonifoh (2014) studied on Corporate Social Responsibility in Nigeria: A Study of the Petroleum Industry and the Niger Delta Area. Data were collected and collated based on the use of sets of questionnaires, interviews and observations. Findings include that the area Niger Delta is poor in development given the unwillingness of the government to sacrifice expected high returns on petroleum exploration for the development of the area and lack its of knowledge of and willpower to make and execute uninformed decisions concerning the exploration and management of the activities of multi-national companies operating in the area. Orajekwe et al. (2021) examined the effect of corporate social responsibility on financial sustainability of quoted oil and gas firms in Nigeria. The research work adopted for the study ex-post facto research design. Secondary data spanning 2009 to 2020 was sourced and collated from financial statement of oil and gas firms annual report in Nigeria and Nigeria Stock Exchange factbook. The data was analyzed employing the Pearson coefficient correlation and least square regression technique. The study revealed that corporate social responsibility has a significant positive effect on net profit margin and return on asset of quoted oil and gas firms in Nigeria at 5% level of significance. Palwei et al. (2014) examined on communication and corporate social responsibility in Shell Petroleum Development Company and Mobile Producing Nigeria Unlimited. The sample size was drawn from eight communities in Bayelsa state of both companies. Altogether, eight hundred and eighty six people were sampled. The data collected were analyzed using mean for the research questions. The research found out that Shell and Mobil's major means of communication with host communities are the face to face newspaper interactions with youths as fair. It was also found out that Shell and Mobil frequently

interact with chiefs and that the communication encounters are more during crisis period. Drawing upon supportive evidence from the literature, such as Marin and Ruiz (2007) who found a strong association between a customer’s attraction and brand credibility and the CSR-related causes, such as environmental protection and green policies, we hypothesize:

Ho₁: Environmental responsibility has no significant relationship with profitability in oil and gas industry in South South, Nigeria.

Ho₂: Environmental responsibility has no significant relationship with market share in oil and gas industry in South South, Nigeria.

Ho₃: Environmental responsibility has no significant relationship with sales volume in oil and gas industry in South South, Nigeria.

3.0 MATERIALS AND METHODS

Research methodology entails the overall research plans and designs that guided the progression of data collection and the choice of approaches used in research to collate data. Quasi-experimental research design was adopted. The total population in this paper is oil and gas firms in South-South, Nigeria. The population cuts across Akwa Ibom, Bayelsa, Cross Rivers, Edo, Delta and Rivers States. For precision and availability of required data, the study considered only major oil and gas downstream firms that have their operational bases in South-South States of Nigeria. According to ministry of petroleum and Natural Resources, there are ten (10) major oil and gas downstream firms in South-South States of Nigeria. They include; Mobil Producing Nigeria Unlimited (MOPNU), Total Petroleum Nigeria Limited (TPNL), Texaco Overseas Petroleum Company of Nigeria Limited (TOPCN), Eroton Ltd (EL), ConoilNigPlc, Forte Oil Plc, MRS Nig Plc., Oando Plc. Rainoil and NNPC (mega) stations of the six south-south states of Nigeria. Information gathered from the human resources departments of each of the firms revealed that there are one thousand two hundred and twenty-three (1223) top level managers which are referred to as accessible population of the firms. Summary of the accessible population are represented below:

Table 1: Number of Accessible Population

S/N	Name of firms	RS	BS	CRS	AIS	DS	ES	Total	Sample Size
1	Conoil	29	28	26	24	20	26	153	38
2	Eroton	18	11	12	14	9	13	77	19
3	Forte	28	21	19	32	26	28	154	38
4	Mobil	32	24	27	25	28	19	155	38
5	MRS	32	21	19	30	28	24	154	38
6	NNPC Mega	1	1	1	1	1	1	6	1
7	Oando	31	22	20	29	25	26	153	38
8	Rainoil	27	7	16	19	15	12	96	24
9	Texaco	28	15	18	22	15	22	120	29
10	Total	32	26	24	26	27	20	155	38
	TOTAL							1223	301

The researcher employed Taro Yamen Formula to get 301 as sample size which were allocated to the various firms selected.

The questionnaire was subjected to a validity and reliability analysis. For the validity tests, the statement items were tested for discriminant validity (average variance extracted: AVE) based on 0.50 threshold. On the other hand, Reliability measures consistency and stability of instrument over time and Cronbach Alpha was employed.

Table 2 Properties of the CSR and marketing success Instruments.

Constructs/indicators	Standardized loading(λ)	λ^2	AVE	CR	Cronbach Alpha
Environmental Responsibility			0.78	0.94	0.872
ER1	0.925	0.856			
ER2	0.835	0.697			
ER3	0.877	0.769			
ER4	0.901	0.812			
Sales Volume			0.75	0.92	0.815
SV1	0.828	0.686			
SV2	0.844	0.712			
SV3	0.888	0.789			
SV4	0.891	0.794			
Profitability			0.74	0.92	0.811
P1					
P2	0.878	0.771			
P3	0.797	0.635			
P4	0.897	0.805			
	0.867	0.752			
Market Share			0.78	0.94	0.799
MS1	0.887	0.787			
MS2	0.883	0.780			
MS3	0.858	0.736			
MS4	0.910	0.828			

Evidence on the outputs from the factor analysis as shown in Table 2 present the standardized factor loading values of all items were above the value of 0.50. Additionally, composite reliability (CR) and average variance extracted (AVE) were computed using the standardized factor loadings. All these values were above the threshold value of 0.70. Moreover, the AVE value was calculated for each variable. The AVE values were above 0.50, which was acceptable. It is also expected that CR is higher than AVE outputs. Also the calculated AVE and composite reliability as well as SPSS output of Cronbach's Alphas for the sixteen (16) statement items demonstrated a high level of reliability on the constructs of corporate social responsibility and market success. All items loadings were above 0.70.

4.0 Data Analysis, Presentation and interpretation

Table 3 Correlation showing the relationship between of environmental responsibility and profitability, market share and sales volume

			Correlations			
			Environmental Responsibility	Profitability	Market Share	Sales Volume
Spearman's rho	Environmental Responsibility	Correlation Coefficient	1.000	.831**	.834**	.852**
		Sig. (2-tailed)	.	.000	.000	.000
		N	283	283	283	283
	Profitability	Correlation Coefficient	.831**	1.000	.883**	.901**
		Sig. (2-tailed)	.000	.	.000	.000
		N	283	283	283	283
	Market Share	Correlation Coefficient	.834**	.883**	1.000	.899**
		Sig. (2-tailed)	.000	.000	.	.000
		N	283	283	283	283
	Sales Volume	Correlation Coefficient	.852**	.901**	.899**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	283	283	283	283

** . Correlation is significant at the 0.05 level (2-tailed).

Decision: Table 3 above shows a Spearman Rank Correlation Coefficient of environmental responsibility on profitability, market share and sales volume. Firstly, environmental responsibility has a strong and positive correlation relationship with profitability (Rho = 0.831). Secondly, environmental responsibility has a strong and positive significant relationship with market share at Rho = 0.834. Thirdly, environmental responsibility has a strong and positive significant relationship with sales volume (Rho = 0.852). This result indicates that there is a strong and positive significant relationship between environmental responsibility and marketing success of oil and gas industry in South-South, Nigeria. Therefore, as stated in the decision rule we reject the null hypothesis and accept the alternate hypothesis, because the PV (0.000) < 0.05 level of significance.

4.1 Discussion of Results

The results supported all the three hypotheses formulated for the study. The test of hypothesis one shows that environmental responsibility was positively related to profitability of oil and gas industry in South-South, Nigeria. This finding is consistent with previous studies such as Ayodele, et al., (2017), Muhammad et al. (2014) and Rizwan et al. (2013).

The test of hypothesis two shows a positive and strong significant relationship between ER and market share of oil and gas industry in South-South, Nigeria. This finding is supported by previous studies which affirmed that appropriate innovation is a premium to a wood work outlet (Ayodele, et al., 2017; Maha&Ahmed, 2012; Irawan&Darmayanti, 2012).

The result of the test of hypothesis three shows that ER has negative and strong significant relationship with sales volume of oil and gas industry in South-South, Nigeria. Our findings agree with the findings of Ayodele et al. (2017) that ER has a negative significant relationship with green purchase intentions.

5.0 Conclusion

This study sought to establish a relationship between ER and marketing success of oil and gas industry in South-South, Nigeria. The concept of ER and marketing success, as used in this study, were discussed, and hypotheses formulated there from. The results of the tested hypotheses indicated that ER has strong and positive significant relationship with marketing success. Countries need to pursue efforts to manage natural resources in a sustainable manner. This requires the development of indicators to properly value natural resources. The study therefore concludes that ER positively influence marketing success.

5.1 Recommendations

- i. Government through its environmental regulatory agencies and commission should enforce laws and guidelines that educate and influence public awareness on the need to act pro environmentally through energy efficiency and even in their consumption behaviour.
- ii. It is also imperative for oil and gas firms in South-South States of Nigeria to come into play and promote environmentalism by developing stakeholders to prefer what is good for their environment. However, this is an extensive procedure and will take elongated time to nurture the concern for environment.
- iii. Government should also play its part in encouraging in development and production of environmental friendly and efficient products.
- iv. Oil and gas firms should invest and develop more on eco-practices, in order to have a bigger impact on the market, and emerge as being environmentally conscious organization and giving more attention to environmentally conscious customers who take an active role in protecting it.
- v. Proper disposal and management of crude and gas waste should be encouraged among consumers, producers and government.
- vii. Government shall ensure that any oil and gas firms involved in any corrupt practices should be severely dealt with. This will enhance strict implementation of environmental laws and green marketing policies.

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