ISSN: 2360-9923. Volume 14, Issue 6, (July, 2024) pages 183 – 196

DOI: 2726452731473 journals@arcnjournals.org https://arcnjournals.org



Green Culture and Organizational Performance of Pharmaceutical Firms in Anambra State

 $^{\rm 1}$ NWAGHODOH, Jude Chiedu, $^{\rm 2}$ Dr. MESIGO, Chukwunweike Chidube $^{\rm 3}$ Prof. Idemobi Ellis

^{1,2&3}Department of Business Administration, Chukwuemeka Odumegwu Ojukwu University Igbariam, Anambra State, Nigeria

Abstract: This study examined the green culture and organizational performance of pharmaceutical firms in Anambra state. The researcher developed three objectives such as to: Evaluate the effect of green technology on the growth of pharmaceutical firms in Anambra state Nigeria. Examine the effect of green innovation on the growth of pharmaceutical firms in Anambra state Nigeria. Assess the effect of Green Competitive Advantage on the growth of pharmaceutical firms in Anambra state Nigeria. Four hypotheses were formulated in line with the stated objectives of the study. The study adopted survey method of research. Data were generated through primary and secondary sources. The method for data collection was questionnaire which was administered randomly among the staff of the selected pharmaceutical firms in Anambra State. The population of the study was 308 from 20 pharmaceutical firms in Anambra state; the sample size of the study was the same population because it is not up to 1000. Two hundred and ninety-eight (298) where retrieved. The hypotheses were tested using regression analysis method at 0.05% level of significance. The findings of the study revealed that, Green Technology (GTE), has significant effect on growth of pharmaceutical firms in Anambra State, (T, 3.228 p, 0.001). Green innovation has significant effect on growth of pharmaceutical firms in Anambra State, (T, 4.429 P, 0.00). Green Competitive Advantage has significant effect on growth of pharmaceutical firms in Anambra State (T, 2.737 P, 0.001). The study recommends that, Organization while in pursuit of their primary goals should also embrace innovation; Company must pay attention to environmental factors because it is to pay attention to the continuity of the business being carried out. Companies that pay attention to environmental factors today can win the business competition for a long time.

Keywords: green culture, green innovation, green technology, Green Competitive Advantage, pharmaceutical firms.

1.1 Introduction

Organizations are progressively incorporating sustainability into their goals and actions as public understanding and awareness of rising environmental sustainability expand (Ikram, Zhou, Shah, & Liu, 2019). Performance concerns are becoming more significant to businesses as a result of increased public awareness, stricter environmental laws, and growing shareholder pressure to protect the environment (Wang, 2019). The performance of organizations is negatively impacted by environmental deterioration, claim Kraus, Rehman, and García (2020). Today's academics, business leaders, environmental policymakers, and industrialists all support this. Several studies have examined the development of managerial competencies and traits that support organizational growth in a range of areas, including economic and environmental performance (Dzhengiz & Niesten, 2020). Additionally, a significant body of research suggests that firms must fortify their competitive advantage in order to maintain and improve their financial sustainability due to shifts

in public expectations. Businesses are under increasing pressure to create and implement creative, long-term plans both inside their own buildings and across their supply chains (Neutzling, Land, Seuring, & Do Nascimento, 2018).

The numerous performance difficulties that have been identified have made it necessary for organizations to focus on environmental and nature conservation activities. Academics and business professionals have been motivated in recent decades to focus on "green" issues (Vallaster, Kraus, Kailer, & Baldwin, 2019). Researchers are progressively focusing on concepts like "green innovation" instead of the broader conversation, claim Chakraborty and Biswas (2020) (Song & Yu, 2018; Takalo & Tooranloo, 2021). The fierce competition in today's global economy has led to a rapid development of global business trends. Businesses need to be accountable for the effects of their operations on the environment in addition to making a profit and gaining a competitive edge. Consequently, the current study focuses on the factors taken into account while assessing organizational success.

Technology-related challenges become more important in direct proportion to how a firm is carrying out its green innovation ambitions. On the other hand, companies tend to adopt green standards of practice only if they feel that doing so will give them a competitive edge and financial gain (García-Machado & Martínez-Ávila, 2019). Organizations are finding that environmental responsibility is growing crucial, and it is now a major part of their entire environmental strategy (Wang & Juo, 2021). Eco-friendly initiatives may help businesses achieve better outcomes by reducing production costs and increasing economic efficiency, claim Huang and Li (2017) (Ghisellini, Cialani, & Ulgiati, 2016). Consequently, long-term performance frequently depends on environmental initiatives (Ainin, Nagshbandi, & Dezdar, 2016). It's feasible that the modifications brought about by implementing a green culture may enhance organizational performance. There hasn't been much empirical data in recent years to support the idea that organizational performance and green innovation give businesses a financial advantage (El-Kassar & Singh, 2019). Scholars have focused on green organisational culture, which is generally regarded as a significant phenomena (Yang, Sun, Zhang, & Wang, 2017) Scholarly publications state that the industrial sector globally recognizes the value of a green corporate culture. Green organizational culture is becoming increasingly important and crucial for organizations because to the increased emphasis on performance (Roscoe, Subramanian, Jabbour, & Chong, 2019). Businesses have historically focused on turning a profit, but in light of current events, they should also give environmental protection first priority (Bennett & James, 2017). To find out how well people behave, researchers have looked at a green organizational culture (Chandra, Arafah, & Basri, 2021). Furthermore, a small number of studies have demonstrated that an organization's performance is significantly improved by having a green organizational culture (Wang, 2019). Despite a lack of solid proof, academics continue to focus on the association between an organization's performance and its green organizational culture, despite multiple studies showing this relationship. The research indicates that there is no clear correlation between an organization's success in terms of sustainability and its green organizational culture. Furthermore, several researchers suggested using moderators or mediators between green organizational culture and organizational performance, notwithstanding the findings of previous studies (Chandra, Arafah, & Basri, 2021) (Gürlek & Tuna, 2018). According to the findings of Leal-Rodríguez, Ariza-Montes, Morales-Fernández, and Albort-Morant (2018), environmental performance and green innovation are important predictors of organizational performance, urthermore, studies have shown that longterm success depends on green innovation (Awan, Sroufe, & Kraslawski, 2019; Sobaih, Hasanein,

& Elshaer, 2020). It was regrettable that the researchers gave little consideration to green innovation when evaluating environmental performance. The total success of this study is evaluated using environmental performance and green innovation. Despite this, studies have not given much consideration to a product's environmental performance when evaluating its environmental performance. Academics and industrial researchers have paid less attention to green organizational culture when assessing organizational performance in large pharmaceutical enterprises, despite the fact that environmental performance is moderating and green innovation mediates organizational performance.

1.2 Objectives of the Study

The main objective of this study is to examine the green culture and organizational performance of pharmaceutical firms in Anambra state. Specifically, this study seeks to:

- i. Evaluate the effect of green technology on the growth of pharmaceutical firms in Anambra state Nigeria.
- ii. Examine the effect of green innovation on the growth of pharmaceutical firms in Anambra state Nigeria.
- iii. Assess the effect of Green Competitive Advantage on the on the growth of pharmaceutical firms in Anambra state Nigeria.

1.3 Research Hypotheses

The following hypotheses were posed to guide the study:

Ho₁ Green technology has no significant effect on the growth of pharmaceutical firms in Anambra state Nigeria.?

HO₂ Green innovation has no significant effect on the growth of pharmaceutical firms in Anambra state Nigeria.?

Ho3 Green Competitive Advantage has no significant effect on the growth of pharmaceutical firms in Anambra state Nigeria.?

LITERATURE REVIEW

2.1 Theoretical Framework

Barney's (1986) resources-based-view theory serves as the foundation for this investigation. According to the resource-based view (RBV), companies have a variety of resources, some of which provide them a competitive edge and some of which improve their long-term success. Competitive advantage can be created by valuable and uncommon resources. According to the resources-based view idea, having strategic resources gives a company a great chance to get an advantage over its competitors. Barney claimed that resources needed to be scarce, precious, imperfectly imitable, and non-substitutable in order to have the potential to be sources of long-term competitive advantage. The resource-based view offers strategists a means of evaluating potential factors that can be deployed to confer a competitive edge. The resource-based view highlights the fact that not all resources are created equal and do not have the capacity to provide long-term competitive advantage. The ability to replicate or replace resources is a prerequisite for any competitive advantage to remain viable. Barney notes that in actual practice, it can be quite challenging to understand the causal relationship between the sources of advantage and effective

strategies. Therefore, discovering, comprehending, and categorizing essential talents requires a significant amount of managerial work. In order to create, nurture, and preserve essential resources and competencies, management must also make investments in organizational learning. Preserving a distinctive organizational culture to improve performance is one of these essential competencies. This idea is seen to be pertinent to the research since organizational culture has been valued, uncommon, and imperfectly imitable within the framework of the Resource-Based View (RBV). As a result, it might be used as a resource to build long-term advantage. This supports additional claims that one of the major factors influencing an organization's performance is its culture. The primary thesis of this research is that organizations have distinct competitive performance strategies. Consequently, managers must ascertain which particular culture (i.e., content) can facilitate the attainment of enhanced organizational performance.

2.2 Empirical study

Muhammad & Gao (2022) aims to propose and measure a framework that statistically evaluates how green organizational culture affects organizational performance. More significantly, it examined the mediation of green innovation statistically while examining environmental performance as a hitherto overlooked moderator. This study used a quantitative approach, and the sample size consisted of 170 respondents from whose data were collected. Data was gathered from industrial and service firms across the four states of Malaysia using a closed-ended questionnaire. Convenient random selection was used to get the survey's data. Making use of the PLS-SEM, or structural equation model.

Okechukwu, Federick, & Maryjane, (2023).examined the effect of green organizational culture on organizational Performance of Manufacturing Firm in Enugu Nigeria. Nigeria Breweries, 9 Mile Corner, Enugu State: A research. The dependent variable in this study is employee productivity, while the independent variables are green technology and green organizational policy. A descriptive correlational research design was used in the study. in cases when primary data were used. Data were gathered using a carefully thought-out questionnaire. The information was examined using The results of each of the relevant hypotheses were analyzed using the Statistical Package for the Social Sciences (SPSS version 28.0) and simple linear regression. According to the study, employee productivity is positively impacted by green policies in a statistically significant way (Coefficient = 1.03847; t-statistic =4.9335; p-value =0.001), and positively impacted by green technology in a statistically significant way (Coefficient = -0.7145; t-statistic =1.7218; p-value =031). We concluded that, green organizational culture has significant positive effect on organizational performance. We recommended that, manufacturing firms in Nigeria should endeavor to put more effort on green organizational culture since it has statistically significant positive effect on the organizational performance

Kristian, Willy & Basri, (2021). examine the influence of green culture organizations on organizational performance and green competitive advantage mediated by green innovation. With 185 responses, the sample represents a leadership level made up of managers, CEOs, and a group of manufacturing industry specialists. Purposive sampling was the method of sampling. We employ the Structural Equation Model (SEM) as the analytical technique. According to this study, an organization's green culture has a direct and beneficial impact on green innovation, green competitive advantage, and organizational performance. Additionally, as an indirect result, organizational performance and green competitive advantage are positively and significantly impacted by green innovation and green culture organizations. The company's competitiveness

and performance in terms of economic, operational, and environmental factors will all grow as a result of implementing a green strategy, as these data highlight. The strategy carried out by the company must pay attention to environmental factors because it is to pay attention to the continuity of the business being carried out. Companies that pay attention to environmental factors today can win the business competition for a long time. That is proven by the results of research done.

Okocha, and Akhigbe, (2020). investigated the moderating role of organizational culture on the relationship between Intellectual Capital and Sustainable Competitive Advantage. 819 managers, primarily branch, operations, and customer relationship managers of Tier One deposit money banks in South-South Nigeria, make up the study's population. The instrument was validated using exploratory factor analysis (EFA), and preliminary analyses were carried out to verify equality of variance, normality, and linearity. Copies of the questionnaire were given to a sample size of 262 managers using the sample size determination formula developed by Krejcie and Morgan. Statistical Package for Social Science (SPSS) version 20.0 and Analysis and Moments of Structures (AMOS) version 24.0 were used to analyze data from 250 retrieved and usable copies of the questionnaire. The relationship between intellectual capital and sustainable competitive advantage was shown to be strongly moderated by organizational culture, according to the findings. The study recommended that deposit money banks in South-South should strongly consider making available to employees a means to voice concerns anonymously, such as a hotline. This channels will aid in maintaining and improving corporate culture.

Mac-Ozigbo, & Cross (2021) investigated the effect of organizational culture on employees' performance. The main objective is to uncover how organizational culture affects the performance of employees at the Nigerian Agency for Food and Drug Administration and Control (NAFDAC) in Abuja, Nigeria. Descriptive survey study design was therefore used. As a result, the agency's employees in their Abuja headquarters were individually given 225 structured questionnaires to complete. With the use of frequency tables and simple regression, the acquired data were submitted to both descriptive and inferential analysis using the Statistical Package for Social Sciences (SPSS). Following the inferential procedures, two different outcomes were obtained. First, it was discovered that organizational value significantly influences the job productivity of employees and This study also shown that employee job outcomes are influenced by organizational behaviors. Thus, this study suggests that organizational culture might have an impact on employees' performance, either positively or negatively. As a result, among other things, it was advised that management support an organizational culture that complements its structure and objectives. Senior executives also set the tone in the organization by upholding basic principles that constitute the dominant culture that is shared by the vast majority of its members.

RESEARCH METHODOLOGY

3.1 Research Design

Consequently, it was suggested, among other things, that management support an organizational culture that is consistent with its structure and objectives. Senior executives also set the tone by upholding fundamental principles that constitute the general dominant culture that is shared by the vast majority of the organization's members.

3.2 Area of study

The Nigerian state of Anambra hosted this investigation. Among the five states that comprise the South-East geopolitical zone is Anambra State. Awka is the capital and location of the government. The state's major urban area is Onitsha, a historic pre-colonial port city. The state motto, which was originally known as the "Home for all," is "Light of the Nation". Anambra is home to 21 local government councils and 181 settlements.

3.3 Population of study

APPENDIX 1: Pharmaceutical firms in Anambra state

| S/ | Pharmaceutical firms | Population of Senior staff |
|----|--|----------------------------|
| N | | |
| 1 | Gauze pharmaceuticals and laboratory limited, Awka | 16 |
| 2 | Joez Pharmaceuticals Nigeria Ltd, Awka | 12 |
| 3 | God's pharmaceutical company, Obosi | 15 |
| 4 | Juhel Nigeria Ltd, Awka | 30 |
| 5 | Chazmax Pharmaceutical, Onitsha | 20 |
| 6 | Annygod Pharma Co Lt, Onitsha | 15 |
| 7 | Zidec Pharmaceutical Ltd, Awka | 12 |
| 8 | Alben Healthcare Industries Limited, Ogidi | 20 |
| 9 | Bichan Pharmacy Ltd, Awka | 18 |
| 10 | New Divine Favour Pharmaceuticals, Nkpor | 15 |
| 13 | Megacenter Pharmaceutical, Onitsha | 19 |
| 14 | Manfes Pharmaceutical Company Nigeria Limited, Onitsha | 20 |
| 15 | Lin-Kabs Pharmaceutical Limited, Onitsha | 23 |
| 16 | PX SIMED Pharmacy Nig, Awka | 17 |
| 17 | Alben Pharmaceuticals, Ogidi | 10 |
| 18 | Zunamediks pharmaceuticals limited., Onitsha | 15 |
| 19 | Chez Resources Pharmaceuticals Limited, Onitsha | 13 |
| 20 | Ndubusi Pharmacy Awka Road Onitsha | 18 |
| | Total | 308 |

3.4 Sampling Techniques and Procedures

The study used convenience sampling technique in selecting the sample size of the study based on convenience and easy accessibility to the respondents.

3.5 Source of Data

There are basically two ways of sourcing data. These primary and the secondary.

• Primary Source of Data

These are first hand information that was refined for the purpose of this project. This study made use of the questionnaire as a major source of primary data. This is also known as internal source of data.

Secondary Source of Data

This is information that has already been gathered for other purposes and is therefore already in the public domain. The foundation of knowledge for this project comes from several sources. This involves reading articles from contemporary journals, textbooks, newspapers, the internet, and other sources that discuss creativity, innovation, and the operation of family businesses.

3.6 Method of Data Analysis

Inferential statistics was used to reach conclusions and make generalizations about the characteristics of populations based on data collected from the sample. Hypotheses were analyzed using regression analysis at 0.05% level of significance.

SECTION FOUR

PRESENTATION ANALYSIS AND INTERPRETATION OF DATA

The information gathered from the respondents via the distributed questionnaire is presented in this chapter. The employees of particular companies were given thirty-eight (308) copies. It was discovered that 289 copies of the questionnaire had been lost. As a result, only the completed and returned questionnaire was used for data analysis and interpretation. Notwithstanding the quantity of questionnaires that were not returned, the study's validity and reliability were substantially guaranteed. The methods used were percentage table technique and t-test for the hypothesis. The method was adopted because it possesses a unique estimating property which includes unbiased, efficiency and consistency when compared with other linear unbiased estimates.

Table 4.1. Analysis of response pattern

| Item | Questionnaire | Percentage (%) |
|-----------------------------|---------------|----------------|
| Total number of copies of | 308 | 100 |
| questionnaire administered | | |
| Number of copies of | 300 | 97.4 |
| questionnaire retrieved | | |
| Number of copies of | 2 | .64 |
| questionnaire not retrieved | | |
| Number of copies of | 298 | 298 |
| questionnaire suitable for | | |
| analysis | | |

Source: computed from field survey data, 2024

The response rate for this study was 97.4 % as shown in Table 4.1 by the total number of questionnaire administered and recovered from the field exercise. Three hundred and eight(308) copies of a single questionnaire were administered to respondents, out of which three hundred (300) representing about (97.4%) were retrieved while two (2) were not returned. After assessing the retrieved questionnaire through data preparation, two (2) were rejected due to acts such as

multiple ticking, blank responses, half-way ticking etc. Hence, only two hundred and ninety-eighty (298) copies of the questionnaire were usable to achieve the study objectives and testing hypotheses.

4.2 Bio-data of the Respondents

4.2.1 GENDER

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | FEMALE | 117 | 39.9 | 40.5 | 40.5 |
| | MALE | 172 | 58.7 | 59.5 | 100.0 |
| | Total | 289 | 98.6 | 100.0 | |

Source: SPSS Version 21, 2024

The above table reveals that one hundred and seventeen (117) respondents which represents 40.5% were female respondents, while one hundred and seventy-two (172) respondents which represent 59.5% were male respondents. By implication, male respondents were more than female respondents by 9.5 per cent in our selected population sample for this study. The implication of this is to enable us to know the number of female and male that successfully returned their questionnaire.

4.2.2 Age Bracket

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------|-----------|---------|---------------|--------------------|
| Valid | 18-30 | 91 | 31.1 | 31.5 | 31.5 |
| | 31-40 | 98 | 33.4 | 33.9 | 65.4 |
| | 41-50 | 24 | 8.2 | 8.3 | 73.7 |
| Î | 51-1BOVE | 76 | 25.9 | 26.3 | 100.0 |
| | Total | 289 | 98.6 | 100.0 | |

Source: SPSS Version 21, 2024

In the preceding data, ninety-one (91) respondents, or 31.5 percent, are in the age group below 18 to 30 years. The age group of 31 to 40 years old comes in second with 98, or 33.9% of the total. In the 41–50 year age group, twenty-four (24) people, or 8.3%, were also included. Those that fall into the 51-year-old age group come in second with 76, or 26.3% of the total. This age distribution means that we can determine whether the questionnaire was sent to the appropriate age group.

4.2.3 MARITAL SATUS

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | SINGLE | 120 | 41.0 | 41.5 | 41.5 |
| | MARRIED | 129 | 44.0 | 44.6 | 86.2 |
| | WIDOWED/DIVORECED | 40 | 13.7 | 13.8 | 100.0 |
| | Total | 289 | 98.6 | 100.0 | |

Source: SPSS Version 21, 2024

In the table above, one hundred and twenty (120) of the respondents which represent 41.5% were married, while one hundred and twenty-nine (129) of the respondents which represent 44.6% are single. Lastly, forty (40) of the respondents which represent 13.8% are widowed/divorced. It is

therefore glaring that most of the respondents are married as at the time of this study. Thus marital status table help us to know the number of single, married, and widowed/divorced respondents that answered the distributed questionnaire.

4.2.4 EDUCATIONAL QUALIFICATION

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|---------|-----------|---------|---------------|--------------------|
| Valid | FSLC | 15 | 5.1 | 5.2 | 5.2 |
| | OND/NCE | 102 | 34.8 | 35.3 | 40.5 |
| | BSC/HND | 113 | 38.6 | 39.1 | 79.6 |
| | MSC/MBA | 44 | 15.0 | 15.2 | 94.8 |
| | PHD | 15 | 5.1 | 5.2 | 100.0 |
| | Total | 289 | 98.6 | 100.0 | |

Source: SPSS Version 21, 2024

The table above indicates that fifteen (15) respondents which representing 5.2% maintain to acquire have acquired FSLC, while 35.3% of the respondents which represents one hundred (102) ordinary national diplomas/NCE. However one hundred and thirteen (113) which represent 39.1 percent either have BSC/HND/BA. The respondents that have MS.C/MBA are numbered forty-four (44) which represent 15.2%. Lastly, the respondents that have PHD are numbered fifteen (15) which represent 5.2% This is the one of demographic item helps us to identify the education qualification of the respondent.

4.3 Multiple Regression Analysis

Multiple regression result was employed to test the effect of independent or explanatory variables on the dependent variables. The result of the multiple regression analysis is presented in the tables below.

Table 4.3.1 Summary of the Regression Result

The result of the multiple regressions formulated in chapter three is presented in the tables below.

| | Model Summary ^b | | | | | | | | | |
|-------|----------------------------|----------|----------|-------------------|----------|----------|-----|-----|--------|---------------|
| | | | | Change Statistics | | | | | | |
| 1 | | | Adjusted | Std. Error of | R Square | | | | Sig. F | |
| Model | R | R Square | R Square | the Estimate | Change | F Change | dfl | df2 | Change | Durbin-Watson |
| 1 | .568a | .323 | .316 | 1.35569 | .323 | 46.720 | 3 | 294 | .000 | 1.813 |

a. Predictors: (Constant), GTE, GIN, GCA

b. Dependent Variable: GRT

According to Table 4.3.1, the independent variable's strength of effect on the dependent variable is measured by the R2, which has a value of 323%. This suggests that changes in green technology (GTE), green innovation (GIN), and green competitive advantage (GCA) account for 32% of the variation in growth (GRT). The corrected R2 of 31% provided evidence for this. Using Durbin-Watson statistics, the model was examined for autocorrelation. The variables in the model are not auto-correlated, as indicated by the Durbin-Watson statistics of 1.813 in table 4.3.1, and the model is dependable for predictions.

ANOVA^a

| M | odel | Sum of Squares | df | Mean Square | F | Sig. |
|---|------------|----------------|-----|-------------|--------|-------|
| 1 | Regression | 257.595 | 3 | 85.865 | 46.720 | .000b |
| Ī | Residual | 540.338 | 294 | 1.838 | | |
| | Total | 797.933 | 297 | | | |

a. Dependent Variable: GRT

Green Technology (GTE), Green Innovation (GIN), and Green Competitive Advantage (GCA) are examples of dependent variables on which the independent factors have a substantial impact, as indicated by the f-statistics value of 46.720 in the ANOVA table above with an f-statistics probability of 0.000.

Table 4.3.2 Coefficients of the Model

T-statistics and probability value from the regression result are the effect of individual independent or explanatory variables on the dependent variables. The summary of the result is presented in the table below.

Table 4.3.2 T-Statistics and Probability Value from the Regression Result

Coefficients^a

| | Unstandardized Coefficients | | Standardiz ed Coefficient s | | | 95.0% Confi | idence Interval for B |
|------------|-----------------------------|------------|--------------------------------------|--------|------|----------------|--------------------------|
| Model | В | Std. Error | Beta | t | Sig. | Lower Bound | Upper Bound |
| 1 (Constan | 4.39 | .388 | | 11.322 | .000 | 3.628 | 5.155 |
| GTE | .30 | .094 | .300 | 3.228 | .001 | .488 | .118 |
| GIN | .2 | .065 | .227 | 4.429 | .000 | .159 | .413 |
| GCA | .1 | .104 | .162 | 2.737 | .001 | .384 | .024 |

a. Dependent Variable: GRT

A'priori Criteria: These are established by the business theories that are now in use and also specify the direction and size of the business parameter that is being examined. According to the coefficient table above, Green Technology (GTE) has a positive sign with a value of 303, meaning that an increase of one unit in GTE causes a 30% rise in company growth, which is consistent with the a priori expectation. With a value of 28%, Green Innovation (GIN) has a positive sign, indicating that a unit increase in GIN boosts business growth by 28%, which is consistent with the a priori expectation. With a value of 180, Green Competitive Advantage (GCA) has a positive sign. This suggests that a unit rise in GCA causes a firm's growth to increase by 18%, which is in line with theoretical expectations.

The coefficients and probability values for each individual variable are displayed in Table 4.3.2. On the other hand, the regression t-value for the Green Technology (GTE) variables is 3.228, and the probability value is 0.001. This suggests that Green Technology (GTE) has a noteworthy and favorable impact on the expansion of pharmaceutical companies in the state of

Page | 192

b. Predictors: (Constant), GTE, GIN, GCA

Anambra. With a regression t-test of 4.429 and a probability value of 0.000, Green Innovation (GIN) appears to have a positive and substantial impact on the expansion of pharmaceutical companies in the state of Anambra. Parallel to this, the Green Competitive Advantage (GCA) variable has a probability value of 0.001 and a t-test value of 2.737. This demonstrates that in the state of Anambra, the Green Competitive Advantage has a favorable and noteworthy impact on the expansion of pharmaceutical companies.

4.4 Test of Hypotheses

Here, the hypotheses formulated in chapter one was tested using t-statistics and significance value of the individual variables in the regression result. The essence of this is to ascertain how significant are the effect of individual independent or explanatory variables on the dependent variables.

4.4.1 Test of Hypothesis One

Ho₁ Green Technology (GTE), has no significant effect on growth of pharmaceutical firms in Anambra State?

Green Technology (GTE), has a t-statistics of 3.228 and a probability value of 0.001 which is statistically significant. Therefore, we accept the alternative hypothesis and reject the null hypotheses which state Green Technology (GTE), has significant effect on growth of pharmaceutical firms in Anambra State

4.4.2 Test of Hypothesis Two

HO₂ Green innovation has no significant effect on growth of pharmaceutical firms in Anambra State?

In testing this hypothesis, the t-statistics and probability value in table above is used. Green innovation has a t-statistics of 4.429 and a probability value of 0.000 which is statistically significant. Therefore, we reject the null hypothesis and accept the alternative hypotheses which state that Green innovation has significant effect on growth of pharmaceutical firms in Anambra State

4.4.3 Test of Hypothesis Three

Ho3 Green Competitive Advantage (GCA), has no significant effect on growth of pharmaceutical firms in Anambra State?

Green Competitive Advantage (GCA), has a t-statistics of 2.737 and a probability value of .001 which is statistically significant. Therefore, we reject the null hypothesis and accept the alternative hypotheses which state that Green Competitive Advantage has significant effect on growth of pharmaceutical firms in Anambra State

SECTION FIVE

Conclusion

This study looks at pharmaceutical companies in Anambra State's organizational performance and green culture. The main goal of this essay is to determine whether and how enhanced organizational performance is related to green organizational culture, green innovation, and green competitive advantage. Research has also been done on the relationship between green innovation and company performance, as well as the process of creating a green organizational culture in pharmaceutical companies. The results suggest that a green corporate culture has a beneficial impact on performance, which may be extrapolated to pharmaceutical companies in the state of Anambra. While Chandra et al. (2021) showed that establishing a green organizational culture has a favorable impact on performance, Wang (2019) revealed consistent findings. The degree of green culture has a considerable favorable impact on the organizational performance of pharmaceutical companies in Anambra State, according to the study's objectives and analysis of the data. The following findings were made.

- 1. Green Technology (GTE), has significant effect on growth of pharmaceutical firms in Anambra State, (T, 3.228 p, 0.001)
- 2. Green innovation has significant effect on growth of pharmaceutical firms in Anambra State, (T, 4.429 P, 0.000)
- 3. Green Competitive Advantage has significant effect on growth of pharmaceutical firms in Anambra State (T, 2.737 P, 0.001)

Recommendation

- i. Organization while in pursuit of their primary goals should also embrace innovation
- ii. Company must pay attention to environmental factors because it is to pay attention to the continuity of the business being carried out.
- iii. Companies that pay attention to environmental factors today can win the business competition for a long time.

References

- Ainin, S., Naqshbandi, M. M., & Dezdar, S. (2016). Impact of adoption of Green IT practices on organizational performance. *Quality & Quantity*, 50(5), 1929-1948.
- Awan, U., Sroufe, R., & Kraslawski, A. (2019). Creativity enables sustainable development: Supplier engagement as a boundary condition for the positive effect on green innovation. *Journal of Cleaner Production*, 226, 172-185
- Chakraborty, D., & Biswas, W. (2020). Going green with green HRM practices—A strategic initiative for reinvigorating performance optimization in companies. Prabandhan: *Indian Journal of Management*, 13(10-11), 8-26.

- Chandra, K., Arafah, W., & Basri, Y. Z. (2021). Analysis of the effect of green organizational culture on organizational performance and competitive advantages of green through green innovation in manufacturing industries. *Journal of Hunan University Natural Sciences*, 48(6).24 29.
- Dzhengiz, T., & Niesten, E. (2020). Competences for environmental sustainability: A systematic review on the impact of absorptive capacity and capabilities. *Journal of business ethics*, 162(4), 881-906.
- El-Kassar, A. N., & Singh, S. K. (2019). Green innovation and organizational performance: the influence of big data and the moderating role of management commitment and HR practices. Technological Forecasting and Social Change, 144, 483-498.
- García-Machado, J. J., & Martínez-Ávila, M. (2019). Environmental performance and green culture: The mediating effect of green innovation. An application to the automotive industry. Sustainability, 11(18), 4874.
- Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). A review on circular economy: the expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner production*, 114, 11-32.
- Gürlek, M., & Tuna, M. (2018). Reinforcing competitive advantage through green organizational culture and green innovation. *The service industries journal*, 38(7-8), 467-491.
- Ikram, M., Zhou, P., Shah, S. A. A., & Liu, G. Q. (2019). Do environmental management systems help improve corporate sustainable development? Evidence from manufacturing companies in Pakistan. *Journal of Cleaner Production*, 226, 628-641
- Kraus, S., Rehman, S.U. and García, F.J.S., (2020). Corporate social responsibility and environmental performance: The mediating role of environmental strategy and green innovation. Technological Forecasting and Social Change, 160, 120262.
- Kristian C., Willy W & Basri, Y.Z (2021). Analysis of the effect of green organizational culture on organizational performance and competitive advantages of green through green innovation in manufacturing industries
- Mac-Ozigbo, A & Cross O. D (2021). the effect of organizational culture on employees' performance of Nafdac, Abuja. *World Journal of Management and Business Studies* Vol 1 (1) 29-36
- Muhammad I. & Gao J. (2022) Green Organizational Culture, Organizational Performance, Green Innovation, Environmental Performance: A Mediation- Moderation Model, *Journal of Asia-Pacific Business*,
- Neutzling, D. M., Land, A., Seuring, S., & do Nascimento, L. F. M. (2018). Linking sustainability-oriented innovation to supply chain relationship integration. *Journal of Cleaner Production*, 172, 3448-3458.
- Okechukwu, E. U., Federick, O. E. & Maryjane, O. N. (2023). Effect of green organizational culture on organizational performance of manufacturing firm in Enugu Nigeria. A Study of Nigeria Breweries Enugu state

- Okocha, B. F. and Akhigbe, O. J. (2020). The moderating role of organizational culture on the relationship between intellectual capital and sustainable competitive advantage. *International Journal of Management Sciences* 7 (5) 56-78
- Vallaster, C., Kraus, S., Kailer, N., & Baldwin, B. (2018). Responsible entrepreneurship: Outlining the contingencies. *International Journal of Entrepreneurial Behavior & Research*, 30(4), 666-683.
- Wang, C. H., & Juo, W. J. (2021). An environmental policy of green intellectual capital: Green innovation strategy for performance sustainability. Business Strategy and the Environment.
- Yang, Z., Sun, J., Zhang, Y., & Wang, Y. (2017). Green, green, it's green: A triad model of technology, culture, and innovation for corporate sustainability. Sustainability, 9(8), 1369.