



## Effect of Human Sustainability on the Performance of Manufacturing Firms in Enugu State

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### ABSTRACT

*The study evaluated the effect of human sustainability on the performance of manufacturing firms in Enugu state. The specific objectives were to: evaluate the effect of investment in health on the quality of services of the selected food, beverage and tobacco manufacturing firms in Enugu state and examine the effect of investment in education on the profitability of the selected food, beverage and tobacco manufacturing firms in Enugu State. The study used the survey approach. The primary sources were personal interview and the administration of questionnaire. A population of 4250 and 352 staff of sample size was used using Freund and William formula. 322 staff returned the questionnaire and accurately filled. That gave 91 percent response rate. The validity of the instrument was tested using content analysis and the result was good. The hypotheses were analyzed using Regression. The findings indicated that Investment in health had positive effect on the quality of service of the selected food, beverage and tobacco manufacturing firms in Enugu state  $F(95, n = 322) = 230.956, p > 0.05$  and investment in Education had effect on the profitability of selected food, beverage and tobacco manufacturing firms in Enugu state  $F(95, n = 322) = 646.267, p > 0.05$ . The study concluded that investment in health and Education had positive effect on the quality service and profitability of the selected food, beverage and tobacco manufacturing firms in Enugu state. The study recommended among others that the organizations should include investment in health for their workers to promote safety and wellbeing of the entire organization and its activities.*

**Keywords:** Human Sustainability Manufacturing Firms; Performance; Investment in Education

## 1. Introduction

The success of an organization is linked to the level/the ability of the organizations to sustain its human capital development. Organizations are defined based on the existence of positive ethnicity. Adopting sustainability strategy by organizations helps to boost organizations objectives as it helps to attract best talents who are more interested in the precedence of organizations ethics towards achieving high level of productivity and profit. Grant and Brock (2020) defined sustainability as the focus on meeting the needs of the present without compromising the ability of future generations to meet their needs and also composed of economic, environmental, and social factors as its pillars. Human sustainability in the organization helps to tolerate diversity and thus needs to be incorporated into corporate strategies and reflected in organizational business goals. In Human resource management, sustainability is used to refer to human resources that foster a conducive working environment and positive human and social outcomes without focusing on financial strategies and results (Murphy, 2019). One of the ways of making sure that something lasts is through sustainable development, which envelops the following four verticals: ecology, economics, politics and culture. Neglecting one of these inevitable causes problems with the others as proposed by (Belilovskaya, 2016).

Human sustainability strategy is a call to managers, supervisors, employees and management of organization to eradicate the challenges aligned with human activity, productivity and performance in the organization. To achieve a greater performance in the organization, human figures is highly needed and also the key element. Implementing human sustainability strategy in the organization would help to increase morale and performance of employees in all aspects such as environmental and financial performance. Performance is seen as a compartment of effectiveness and proficiency that covers operational and financial outcomes in the organization. As companies grow and the war for talent intensifies, it is increasingly important that training and development programs are not only competitive but are supporting the organization on its defined strategic path (Gorman, 2015). Performance measures assess the satisfaction the organizations stakeholders. Craig, (2018) opines that company sustainability typically looks at its impact on the community locally and globally, but sustainability starts with the people behind the scenes. It unites them to create a better work culture, work-life balance and contributions to customers and the world. Ensuring human sustainability doesn't detract from business goals, rather infusing the company with purpose can help attract motivated, skilled workforce that drives financial success (Chladek, 2019). It is on this background the study seeks to examine the effect of human of human sustainability on the performance of manufacturing firms in Enugu state.

### Statement of the problem

Sustainability helps to contribute to the overall general good of the organization. Human sustainability in the organization is built with the aim to develop the organization and foster retention. Human sustainability helps to determine future values for the competitive advantages, and increases the company's value in the areas of economic benefits, and financial profits employee motivation and retention. With the evolving rate of rival in manufacturing industries, manufacturing firms ought to augment and motivates its employs to achieve its desired aim. In addition to the impact of human sustainability in the organization, employee motivation and recognition also contribute to the organization's productivity and dedicated employees

Human sustainability consisting of individuals wellbeing, workplace ethics, equity and socialization in the organization is a major factor in the profitability and performance of the organization. Notwithstanding the benefit and importance of human sustainability in manufacturing firm, most employees are being denied its benefits as a result of lack or low knowledge of human sustainability by the organizations human resource. From this study, human sustainability in the manufacturing firm is been faced with the inability of the firm to invest in health and education of its employees forgetting that healthy and knowledgeable employees are a great asset to achieving the organization goal.

Human sustainability enhances avoidance of waste of resources in order to maintain an ecological balance. The importance of human sustainability in the organization should not be neglected in the organization as it helps in decision-making, socialization among employees and therefore be of significant impact to the financial gain of the organization. Neglect to this importance would be of negative impact to the organization which will lead poor quality of service and deteriorating profit in the organization. Hence, this has necessitated the cause of this study which is to examine the effect of human sustainability on the performance of manufacturing firms in Enugu State.

### Objectives of the study

The main objective of the study was to examine the effect of human sustainability on the performance of manufacturing firms in Enugu state. The specific objectives were to:

- i. Evaluate the effect of investment in health on the quality of services of the selected food, beverage and tobacco manufacturing firms in Enugu state.
- ii. Examine the effect of investment in education on the profitability of the selected food, beverage and tobacco manufacturing firms in Enugu State.

### Research Questions

The following research questions guided the study

- i. What is the effect of investment in health on the quality of services of the selected food, beverage and tobacco manufacturing firms in Enugu state?
- ii. What is the effect of investment in education on the profitability of the selected food, beverage and tobacco manufacturing firms in Enugu State?

### Statement of hypotheses

The following alternate hypotheses guided the study

- i. Investment in health has positive effect on the quality of service of the selected manufacturing firms in Enugu State.
- ii. Investment in Education has positive effect on the profitability of selected manufacturing firms in Enugu State.

### Significance of the study

The result of this study will be of great importance to firms as it will help in understanding the need to tackle the challenges of human sustainable business practices in order to reduce cost of production, reduce waste, maximize profitability and sustain a long-term value. It will also help organizations to know the importance of encouraging employees and means through which it could be solved in other to improve their performance.

## 2. Literature Review

### 2.1 Conceptual Review

#### Human Sustainability

Human sustainability in the organization helps to maintaining the organization human capital. Human capital is a private good of individuals, rather than between individuals or societies. The health, education, skills, knowledge, leadership and access to services constitute human capital. Human resource department is regarded as the agent of sustainability in any given organization (Murphy, 2019) Passion and Learning are the steps to quality human sustainability in the organization. Investments in education, health, and nutrition of individuals have become accepted as part of economic development. Human sustainability in the manufacturing firm helps firms to manufacture high quality products at a low price for survival and sustainability. Human development without being sustainable cannot be true human development. Human development is what sustainability proponents want to sustain and without sustainability, human development is not true human development (Neumaver, 2010). Obtaining flexibility and agility by modular design is a significant approach for a firms' sustainability.

## Components of Human Sustainability

### *Investment in Health*

Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity (Sampson, 2020). Health is a state of physical, mental and social well-being in which disease and infirmity are absent (WHO, 2006). Healthy employees are more engaged focused and productive. Manufacturing firms invest in the health of employees through the exposing of employees to the availability of health services such as constant screening and health checkup of employees, constant health preventive vaccine and adequate health information. Kasai, (2019) asserts that health is a smart investment which helps in cost-effective prevention and treatment, provided at the local level, keeps people healthy, and it controls costs. Employees of manufacturing firms can be more productive when their health is considered a priority in the organization. Through investment in health strategy, managers of the organization protect the employees against health challenges that can arise as a result of exposure to pollutions. Kumar (2021) established Health spending is largely viewed as a cost. It would be wise for both governments and individuals to consider health as an investment instead. People and economies are better protected from health security risks when health is valued and invested in. The positive impact that health has on growth and poverty reduction occurs through a number of mechanisms, such as through a reduction of production losses due to fewer worker illnesses, the increased productivity of adults as a result of better nutrition, lower absenteeism rates and improved learning among school children. This relationship also allows for the use of resources that had been totally or partially inaccessible due to illnesses. Finally, it allows for an alternative use of financial resources that might normally be destined for the treatment of ill health as reported by the (Mexican Commission on Macroeconomics and Health, 2004). Health is a human right which should not be denied to anybody.

### *Investment in Education*

Education is the process of facilitating learning, or the acquisition of knowledge, skills, values, morals, beliefs, and habits. Lawson, (2021) stated that education can be thought of as the transmission of the values and accumulated knowledge of a society which is equivalent to what social scientists term socialization or enculturation. Education is regarded as the best legacy any parent can give to his children because it brings out the innate ability and skills in the child to apply in solving any problem in every human endeavor. It is therefore seen as an investment (Abubakar, 2014). Education helps individual to gain access on a path towards good health, empowerment and employment. Educated employees in the manufacturing firms are more opportune to learn skills that will increase their performance and productivity in the organization. The investment case for education and equity calls for urgent action. Educated children are at the heart of healthy, productive and prosperous societies (Brandt, 2015). Educated employees in the manufacturing firm are an important factor in the development of the organization. Dauda, (2010) Suggested that a concerted effort should be made by policy makers to enhance educational investment in order to accelerate growth which would engender economic development. Investment in education is a necessary investment that certifies higher productivity in the economy. To measure the proceeds on the educational investment, the cost-benefit analysis is usually used including the calculation and assessment of all the relevant costs and benefits (UK Essays, 2018). The role education plays in the development of any organization or nation cannot be over-emphasized therefore, it is necessary to establish that no organization can develop beyond her employees' educational level.

### *Performance*

Performance of employees is a regular assessment and evaluation of employees' job performance. Workwise, (2013) defines performance as a management approach to help businesses achieve its goals through the planning of critical performance targets and the measurement of progress towards those targets. Evaluating employees' performance helps employers to set clear expectations in the organization and also measure employees' success. Performance in the manufacturing firm is related to effectiveness and efficiency. Effectiveness as an indicator of the degree of goal attainment, and efficiency an indicator of the resources that were consumed to reach the level of achievement. Ion, and Crivenean, (2016) proposed that performance is a subjective perception of reality, which explains the multitude of critical reflections on the concept and its measuring instruments. Organizations are in a constant search for performance; they want to achieve performance or to improve performance, or more often, to measure the achieved performance level. Overall employee performance will lead to business growth and expansion.

## Components of Performance used in the Study

### *Quality Service*

Service quality or quality service is a strategy used by organizations to achieve its aims and objectives. Services quality is defined as a measure of meet customer needs and expectations by the service. Service quality improves customer satisfaction and cost management increases profit (Yarimoglu, 2014). The ability to achieve a good service quality in the organization depends on the organizations business strategy on quality service. Service quality is as one of the significant structures to explain and justify behavioral objectives related to future and the desired effects on the financial results and consequences of company. Adhikari & Das (2016) explained that the importance of service quality has been gaining momentum over the years as the improvement in service quality is likely to enhance the degree of customer satisfaction, which, in turn, helps a bank to retain its existing customer base in a highly competitive regime. service quality in the manufacturing firms can be asses through physical condition and basic services. Organizations that have a higher level of service quality thus will have a higher level of customer satisfaction as a prelude to achieving sustainable competitive advantage (Guo, Duff, & Hair, 2008).

### *Profitability*

Profitability is the measure of the financial profit or gain generated by an organization. Profitability is ability of a company to use its resources to generate revenues in excess of its expenses (my accounting course, 2021). The determinants of profit in the manufacturing firm are the firms' revenues and expenses. Revenue being the income and expenses the organizations expenditure. Profitability is a business's ability to produce a return on an investment based on its resources in comparison with an alternative investment while Profit is an absolute number determined by the amount of income or revenue above and beyond the costs or expenses a company incurs (Horton, and Potters, 2020). Profitable is one of the keys aims of manufacturing firms as it helps in the retention of a business in the long run. Profitability is used to measure the efficiency and productivity in manufacturing firms. Sherman, (2020) noted that demands for products, cost of making them, the general economy and competitions faced by the organization are factors that affect the profitability of an organization. A profitability determinant especially in the manufacturing industry is very essential - as a main strategy for economic growth for any country adopting an export – oriented industrialization policy within an open economic environment (Ifeduni, and Onyeiwu, 2018).

## 2.2 Theoretical Review

### **Human Relations Theory**

The human relations theory of management began development in the early 1920s. In the 1920s, Elton Mayo, an Australian-born psychologist and organizational theorist, began his research on the behavior of people in groups and how it affects individuals in the workplace. The Human Relations theory has human beings at its center as can be understood by the name, but it also had more to it. It viewed human beings not as machine models but as individuals with differing psychological motivations and with distinct and dynamic group behavior affecting performances. Elton Mayo is often coveted as the father of the Human Relations Movement and his experiment and studies are the most referenced piece of work not just in public administration but also in people management in organizations. Hawthorne experiments that the informal relationships, the group dynamics and day to day functions of an organization are no less complex than the study of the mechanism of the organization. At the end of the day, it becomes important that the employees perform and their performance is sometimes far removed from the parameters and motivators understood by the organization. It has become a concern of all many companies to improve the job-oriented interpersonal skills of employees. The teaching of these skills to employees is referred to as "soft skills" training. Companies need their employees to be able to successfully communicate and convey information, to be able to interpret others' emotions, to be open to others' feelings, and to be able to solve conflicts and arrive at resolutions. By acquiring these skills, the employees, those in management positions, and the customer can maintain more compatible relationships (DuBrin, 2007). Elton Mayo's work has been widely attributed to the discovery of the 'social person', allowing for workers to be seen as individuals rather than merely robots designed to work for unethical and unrealistic productivity expectations. However, this theory has been contested, as Mayo's purported role in the human relations movement has been questioned. The widely perceived view of human relations is said to be one that completely contradicts the traditional views of Taylorism. Elton Mayo's actual role in the human relations movement is controversial and although he is attributed to be the founder of this movement, some academics believe that the concept of human relations was used well before the Hawthorne investigations,

which sparked the human relations movement. The theoretical goals of human relations were no different from those of Taylorism. In essence, both viewpoints sought to make the workplace a more efficient and worker-friendly place.

### 2.3 Empirical Review

Dauda, (2010) Investment in Education and economic Growth in Nigeria: An Empirical Evidence. The basic objective of this paper is to carry out an empirical investigation on the relationship between investment in education and economic growth in Nigeria, using annual time series data from 1977 to 2007. The study employs Johansen cointegration technique and error correction methodology. Empirical results indicate that there is, indeed a long-run relationship between investment in education and economic growth. All the variables including, labour force, gross fixed capital formation and educational capital appear with the expected positive signs and are statistically significant (except labour force) in the Nigerian economy. The findings have a strong implication on educational policy in Nigeria. The study seems to suggest that a concerted effort should be made by policy makers to enhance educational investment in order to accelerate growth which would engender economic development.

Suh and Lee (2010) conducted an empirical study on the manufacturing firm's strategic choice for sustainability in SMEs. An empirical study is performed to verify the relationships proposed, using datasets collected from 232 manufacturing SMEs as module suppliers in South Korea. We used SPSS to analyze data and structural equation modeling to verify the hypotheses of the research model. The important contributions of this study are as follows. Firstly, we suggest relationships among supply chain visibilities and a modular design for supply chain flexibility and agility in sustainable performance. Secondly, we show that supply chain visibility directly leads firms to implement modular design in sustainable development. Thirdly, we verify the importance of supply chain visibility, not for module buyers, but for module suppliers by switching views in terms of SMEs' sustainability. Lastly, this study shows that the suppliers' modular design affects supply chain flexibility and agility, which is consistent with the findings presented in the literature.

Simbo, Banjoko., Iwuji, and Bagshaw, (2012) Examined "the Performance of the Nigerian Manufacturing Sector: A 52-Year Analysis of Growth and Retrogression (1960-2012)" The study examined the performance of the Nigerian manufacturing sector since independence in 1960 using such performance indices as percentage contribution to the Gross Domestic Product, index of manufactured products, percentage growth rate, manufacturing value added, employment growth rate, and percentage of capacity utilization within this period. Secondary sources like the Central Bank of Nigeria Statistical Bulletin, Annual Reports and Statements of Accounts as well as the Statistical Facts sheets of the National Bureau of Statistics and other publications were used in collecting the data. The main finding is that despite many policies and developmental initiatives undertaken by successive civilian and military administrations since independence, the Nigerian manufacturing sector has grossly underperformed in relation to its potentials. Daunting challenges facing the sector include unfavourable business environment, erratic power supply, poor and decaying physical infrastructures, multiple taxations, obsolete technology, high interest rates and inconsistency in government policies. The paper concludes by making recommendations for achieving a verile manufacturing sector.

Phan, Tran, Le, Nguyen, Pervan, and Tran, (2020) conducted a study on the relationship between sustainable development practices and financial performance: A case study of textiles firms in Vietnam. Sustainable development practices have become very important for firms to go beyond short-term profitability, towards economic, environmental and social sustainability. This research aims to examine the relationship between a firm's sustainable development practices and its financial performance. Modeled as a multidimensional construct, sustainable development practices are represented by environmental practices, social practices in the workplace and social practices in the community, while financial performance is determined by profitability and growth. Using a mixed method survey, data were obtained from 389 textile firms in Vietnam, where there is a dire need to promote sustainable and environmental practices. Data analysis using partial least squares structural equation modeling demonstrates that sustainable development practices positively affect financial performance directly and indirectly via customer loyalty, employee satisfaction and corporate reputation. The findings also reveal the moderating role of entrepreneurial orientation, whereby the impact of sustainable development practices on financial performance is stronger for firms that are more innovative, proactive and willing to take risks. Taken together, these findings provide support for firms to holistically implement sustainable development practices and adopt an entrepreneurial orientation.

## 2.4 Gap in Knowledge

The study on the effect of human sustainability on the performance of manufacturing firms in Enugu state was carried out to examine the importance of human sustainability in organizations performance. It is obvious that organizations that practices human sustainability are exposed to talented and skilled employees. The study on human sustainability on the performance of manufacturing also tends to be a current study as related reviewed literatures were mainly on sustainable business practices and workplace environment and activities. This current study aimed to fill this gap through its objectives which is the effect of investment in health on the quality of services and the effect of investment in education on the profitability of the selected food, beverage and tobacco manufacturing firms in Enugu State. This study has also paved way for new areas of research for researchers as it outcome will not only help manufacturing firm but will also help in the increase of GDP which leads to economic development.

## 3. Methodology

The study made use of four (4) selected food, beverage and tobacco manufacturing firms in Enugu state out of nine (9) registered members of manufacturing Associations of Nigeria (MAN). The manufacturing firms include: Aqua Raph Investment, 9th mile Ngwo, Vac industries Emene,17A Emene Industrial Layout, Crystal Chemical industries, Km 10 Abakaliki- Enugu Expressway and Bons west African Ltd, Trans Ekulu, Enugu. The study used the survey approach. The primary sources were personal interview and the administration of questionnaire. A population of 4250 and 352 staff of sample size was used using Freund and William formula. 322 staff returned the questionnaire and accurately filled. That gave 91 percent response rate. The validity of the instrument was tested using content analysis and the result was good. The reliability was tested using the Pearson correlation coefficient (r). It gave a reliability co-efficient of 0.79 which was also good. Data was presented and analyzed by mean score (3.0 and above a greed while below 3.0 disagreed) and standard deviation using Sprint Likert Scale. The hypotheses were analyzed using Regression.

## 4. Data Presentation and Analyses

4.1 The effect of investment in health on the quality of services of the selected food, beverage and tobacco manufacturing firms in Enugu state.

Table 4.1.1: Responses to the effect of investment in health on the quality of services of the selected food, beverage and tobacco manufacturing firms in Enugu state.

		<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>∑FX</b>	<b>-</b>	<b>SD</b>	<b>Decision</b>
		<b>SA</b>	<b>A</b>	<b>N</b>	<b>DA</b>	<b>SD</b>		<b>X</b>		
1	Health caring in my organisation	620	404	99	32	48	1203	3.74	1.402	Agree
	has reduce poverty of the	124	101	33	16	48	322			
	employees	38.5	31.4	10.2	5.0	149	100%			
2	The organisation productivity	595	393	105	44	48	1185	3.68	1.412	Agree
	has increased through	119	98	35	22	48	322			
	investment in employee well	37.0	30.4	10.9	6.8	14.9	100%			
3	Investment in health in my	420	624	51	40	45	1180	3.66	1.367	Agree
	organisation has yields returns	84	156	17	20	45	322			
	by lowering need for curative	26.1	48.4	5.3	6.2	14.0	100%			
4	Improvement in jobs have been	920	160	81	52	45	1258	3.91	1.495	Agree
	successful and fairer societies by	184	40	27	26	45	322			
	health spending in the	57.1	12.4	8.4	8.1	14.0	100%			
5	Investment in heath will	545	628	45	30	26	1274	3.96	1.140	Agree
	improve the health of the	109	157	15	15	26	322			
	organisation and output of the	33.9	48.8	4.7	4.7	8.1	100%			
	employees									

Total Grand mean and standard deviation

3.798 1.312

Source: Field Survey, 2020

Table 4.1.1, 225 respondents out of 322 representing 69.9 percent agreed that health caring in the organization has reduce poverty of the employees with mean score of 3.74 and standard deviation of 1.402. The organization productivity has increased through investment in employee well-being with 217 respondents representing 67.4 percent agreed with mean score of 3.68 and standard deviation of 1.412. Investment in health in my organization has yields returns by lowering need for curative care with 240 respondents representing 74.5 percent agreed with mean score of 3.66 and standard deviation of 1.367. Improvement in jobs have been successful and fairer societies by health spending in the organization with 224 respondents representing 69.5 percent agreed with mean score of 3.91 and 1.495. Investment in heath will improve the health of the organization and output of the employees with 266 respondents representing 82.7 percent agreed with a mean score of 3.96 and standard deviation of 1.140.

4.2: The effect of investment in education on the profitability of the selected food, beverage and tobacco manufacturing firms in Enugu State.

Table 4.2.1 Responses to the effect of investment in education on the profitability of the selected food, beverage and tobacco manufacturing firms in Enugu State.

		5 SA	4 A	3 N	2 DA	1 SD	ΣFX	- X	SD	Decision
1.	Going through education people	360	600	48	120	24	1152	3.58	1.231	Agree
	are physical better functioning	72	150	16	60	24	322			
	and produce more income	22.4	46.6	5.0	18.6	7.5	100%			
2.	The mental functioning is better	430	524	63	138	24	1179	3.58	1.288	Agree
	for the better educated and	86	131	12	69	24	322			
	improvement in the generation of income	26.7	40.7	3.7	21.4	7.5	100%			
3.	The well educated are	455	420	78	142	29	1124	3.49	1.342	Agree
	substantially less likely to report	91	105	26	71	29	322			
	of poor health and anxiety	28.3	32.6	8.1	22.0	9.0	100%			
4.	Educational training and skill	280	636	15	138	33	1102	3.42	1.281	Agree
	development improve my	56	159	5	69	33	322			
	organisation earnings	17.4	49.4	1.6	21.4	10.2	100%			
5	There is absorption of new	350	468	27	138	57	1040	3.23	1.452	Agree
	technologies that accelerates	70	117	9	69	57	322			
	more revenue in the organisation.	21.7	36.3	2.8	21.4	17.7	100%			
<b>Total grand mean and standard deviation</b>								<b>3.478</b>	<b>1.368</b>	

Source: Field Survey, 2021

Table 4.2.1, indicated that 222 respondents out of 322 representing 69.0 percent agreed that going through education people are physical better functioning and produce more income with mean score of 3.58 and standard deviation of 1.231. The mental functioning is better for the better educated and improvement in the generation of income with 217 respondents representing 67.4 percent Agreed with means score of 3.58 and standard deviation of 1.288. The well-educated are substantially less likely to report of poor health and anxiety with 196 respondents representing 60.9 percent agreed with mean score of 3.49 and standard deviation of 1.342. Educational training and skill development improve the organization earnings with 215 respondents representing 66.8 percent agreed with mean score of 3.42 and 1.281. There is absorption of new technologies that accelerates more revenue in the organization with 187 respondents representing 58.0 percent agreed with a mean score of 3.23 and standard



deviation of 1.452.

### 4.3 Test of Hypotheses

4.3.1 Hypothesis One: Investment in health has effect on the quality of service of the selected food, beverage and tobacco manufacturing firms in Enugu state

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778 <sup>a</sup>	.777	.777	.06153

a. Predictors: (Constant), ASW, YHG, YYH, RRF, TTG

**ANOVA<sup>a</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	437.199	5	87.440	230.956	.000 <sup>b</sup>
	Residual	1.196	316	.004		
	Total	438.395	321			

. Dependent Variable: AAA

Predictors: ASW, YHG, YYH, RRF, TTG

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.010	.014		.744	.458
	ASW	.386	.004	.466	90.819	.000
	YHG	.213	.005	.239	40.242	.000
	YYH	.187	.004	.240	47.979	.000
	RRF	.202	.004	.197	55.610	.000
	TTG	.014	.004	.014	3.622	.000

a. Dependent Variable: AAA

Where:

AAA = Investment in health has positive effect on the quality of service of the selected food, beverage and tobacco manufacturing firms in Enugu state.

ASW = Health caring in my organization has reduce poverty of the employees,

YHG = Investment in health will improve the health of the organization and output of the employees,

YYH = Improvement in jobs have been successful and fairer societies by health spending in the organization,

RRF = The organization productivity has increased through investment in employee well being,

TTG = Investment in health in my organization has yields returns by lowering need for curative care

Level of significance:  $\alpha$  at 5%

Degree of freedom:  $\frac{N-1}{K-N} = \frac{5-1}{322-5} = (317, 4) = 2.7858$

F - tabulated value = 2.7858

#### Decision Rule:

If the f-calculated is greater than the f-tabulated {F-cal > F-tab} reject the null hypothesis {H<sub>0</sub>} that the overall estimate is not significant and if otherwise conclude that the overall estimate is statistically significant.

**Decision**

**Statistical Criteria {First Order Test}**

**Coefficient of Multiple Determinants {R<sup>2</sup>}**

The R<sup>2</sup> {R-Squared} which measures the overall goodness of fit of the entire regression, shows the value as .777 and adjusted to .777. This means that R<sup>2</sup> suggests that investment in health variables accounted for 77.7 percent approximately 77.7 percent of variation of the quality of service of the selected food, beverage and tobacco manufacturing firms in Enugu state. This indicated that the independent variables explained about 78 percent of the variation in the dependent variable. It showed goodness of fit. We then concluded from the analysis investment in health had positive effect on the quality of service of the selected food, beverage and tobacco manufacturing firms in Enugu state.

From the result, f-calculated {230.956} is greater than the f-tabulated {2.7858}, that is, F<sub>cal</sub> > F<sub>tab</sub>. Hence, we reject the null hypothesis {H<sub>0</sub>} and accept Alternative hypothesis which means that the overall estimate has a good fit which also implies that our independent variables are simultaneously significant. We now concluded from the analysis that Investment in health had positive effect on the quality of service of the selected food, beverage and tobacco manufacturing firms in Enugu state.

The computed t ranges from 3.622 > 90.819 is greater than the table value of .000, we reject the null hypothesis. Therefore, we concluded that investment in health had positive effect on the quality of service of the selected food, beverage and tobacco manufacturing firms in Enugu state as reported in the probability value of (t = 3.622 > 90.819, p < .05)

**4.3.2 Hypothesis Two: Investment in Education has effect on the profitability of selected food, beverage and tobacco manufacturing firms in Enugu state.**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.815 <sup>a</sup>	.814	.814	.11668

a. Predictors: (Constant), ZZH.NNB, KKI, OOI, EED

**ANOVA<sup>a</sup>**

Model	Sum of Squares	Df	Mean Square	F	Sig.
: Regression	439.913	5	87.983	646.267	.000 <sup>b</sup>
Residual	4.302	316	.014		
Total	444.215	321			

a. Dependent Variable: BBB

b. Predictors: (Constant), ZZH.NNB, KKI, OOI, EED

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
: (Constant)	.083	.021		3.931	.000
ZZH	.314	.010	.343	32.236	.000
NNH	.181	.010	.206	17.670	.000
KKI	.282	.012	.307	22.528	.000
OOI	.193	.007	.238	26.047	.000
EED	.009	.006	.011	1.459	.145

a. Dependent Variable: BBB

**Where:**

BBB = Investment in Education has effect on the profitability of selected food, beverage and tobacco manufacturing firms in Enugu state.

ZZH = Going through education people are physical better functioning and produce more income,

NNH = The well educated are substantially less likely to report of poor health and anxiety,

KKI = There is absorption of new technologies that accelerates more revenue in the organization.,

OOI = The mental functioning is better for the better educated and improvement in the generation of income,

EED = Education training and skill development improves my organization earnings

Level of significance:  $\alpha$  at 5%

Degree of freedom:  $\frac{N-1}{K-N} = \frac{5-1}{322-5} = (317, 4) = 2.7858$

F - tabulated value = 2.7858

**Decision Rule:**

If the f-calculated is greater than the f-tabulated {F-cal > F-tab} reject the null hypothesis {H<sub>0</sub>} that the overall estimate is not significant and if otherwise conclude that the overall estimate is statistically significant.

**Decision**

**Statistical Criteria {First Order Test}**

**Coefficient of Multiple Determinants {R<sup>2</sup>}**

The R<sup>2</sup> {R-Squared} which measures the overall goodness of fit of the entire regression, shows the value as .814 and adjusted to .814. This means that R<sup>2</sup> suggests that investment in Education variables accounted for 81.4 percent approximately 81 percent of variation of the profitability of selected food, beverage and tobacco manufacturing firms in Enugu state. This indicated that the independent variables explained about 89 percent of the variation in the dependent variable. It showed goodness of fit. We then concluded from the analysis that selected food, beverage and tobacco manufacturing firms in Enugu state.

From the result, f-calculated {646.267} is greater than the f-tabulated {2.7858}, that is, Fcal > F-tab. Hence, we reject the null hypothesis {H<sub>0</sub>} and accept Alternative hypothesis which means that the overall estimate has a good fit which also implies that our independent variables are simultaneously significant. We now concluded from the analysis that selected food, beverage and tobacco manufacturing firms in Enugu state.

The computed t ranges from 1.459 > 32.236 is greater than the table value of .000, we reject the null hypothesis. Therefore, we concluded that investment in Education had effect on the profitability of selected food, beverage and tobacco manufacturing firms in Enugu state as reported in the probability value of (t = 1.459 > 32.236, p<.05).

**4.4 Discussion of Findings**

The result of hypothesis one, green recruitment variables accounted for 78 percent of variation of the level of reliability of service, the result, F-calculated {230.956} and the computed t ranges from (t = 3.622 > 90.819, p<.05) is greater than the table value of .000. It was concluded that investment in health had positive effect on the quality of service of the selected food, beverage and tobacco manufacturing firms in Enugu state. In support of the result, Dauda, (2010) carried out a study on investment in Education and economic Growth in Nigeria: An Empirical Evidence. The findings have a strong implication on educational policy in Nigeria. Moreover, Suh and Lee (2010) conducted an empirical study on the manufacturing firm's strategic choice for sustainability in SMEs. The study concluded that there are relationships among supply chain visibilities and a modular design for supply chain flexibility and agility in sustainable performance and supply chain visibility directly leads firms to implement modular design in sustainable development.

The result of hypothesis two, planning variables accounted for 81 percent of variation of the responsiveness of service, the result, F-calculated {646.267} and the computed t ranges from (t = 1.459 > 32.236, p<.05) is greater than the table value of .000. It was concluded that investment in Education had effect on the profitability of selected

food, beverage and tobacco manufacturing firms in Enugu state. In support of the result in the literature, Phan, Tran, Le, Nguyen, Pervan, and Tran, (2020) conducted a study on the relationship between sustainable development practices and financial performance: A case study of textiles firms in Vietnam. The findings revealed that the moderating role of entrepreneurial orientation, whereby the impact of sustainable development practices on financial performance is stronger for firms that are more innovative, proactive and willing to take risks. Taken together, these findings provide support for firms to holistically implement sustainable development practices and adopt an entrepreneurial orientation.

### 5.1 Summary of the findings

- I. Investment in health had positive effect on the quality of service of the selected food, beverage and tobacco manufacturing firms in Enugu state  $F(95, n = 322) = 230.956, p > 0.05$ .
- II. Investment in Education had effect on the profitability of selected food, beverage and tobacco manufacturing firms in Enugu state  $F(95, n = 322) = 646.267, p > 0.05$ .

### 5.2 Conclusion

The study concluded that investment in health and Education had positive effect on the quality service and profitability of the selected food, beverage and tobacco manufacturing firms in Enugu state. Human sustainability is a call to managers, supervisors, employees and management of organization to eradicate the challenges aligned with human activity, productivity and performance in the organization. To achieve a greater performance in the organization, human figures is highly needed and also the key element. Implementing human sustainability strategy in the organization would help to increase morale and performance of employees in all aspects such as environmental and financial performance.

### 5.3 Recommendation

The study recommended the following.

1. The organizations should include investment in health for their workers to promote safety and well-being of the entire organization and its activities.
2. The study suggested that a serious effort should be made by the people in-charge to promote educational investment in order to enhance engender economic development.

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