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**EFFECT OF ENTREPRENEURIAL ORIENTATION ON AGRIBUSINESS ENTREPRENEURS' PERFORMANCE IN EBONYI STATE, NIGERIA**

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**ABSTRACT**

*This study estimated the degree of entrepreneurial orientation (EO) and the effect of entrepreneurial orientation (EO) on the performance of agribusiness entrepreneurs in Ebonyi State, Nigeria. Primary data were collected using a well-structured questionnaire and oral interviews. One hundred agribusiness entrepreneurs were selected through a multi-stage random sampling procedure. Data were analyzed using both descriptive statistics and inferential statistics. Descriptive statistics such as frequencies, percentages, mean, and standard deviation were used. Multiple regression was used to examine the relationship between each of the constructs of entrepreneurial orientation and the agribusiness performance of entrepreneurs. The grand mean result of the degree of innovativeness, pro-activeness, and risk-taking dimensions of entrepreneurial orientation was greater than three (>3), showing that the three EO dimensions studied significantly contributed to agribusiness performance in the study area. The result of regression analysis shows that two out of the three EO constructs (pro-activeness  $p < 0.01$ , and risk-taking initiative  $p < 0.01$ ) and education ( $p < 0.05$ ) had a significant positive relationship with the performance of the agribusiness entrepreneurs with a coefficient of multiple determination ( $R^2$ ) of 0.731. The study concluded that the application of EO constructs led to an increase in agribusiness performance. It recommended awareness creation to embrace entrepreneurial orientation dimensions by agribusiness entrepreneurs in the study area so as to increase their profit by always searching for and promoting new opportunities. Involvement in a calculated risk venture, while the government should take advantage of the literacy level to organize training, workshops, and seminars to position the entrepreneurs toward tackling the emerging challenges in the agribusiness sector.*

**Keywords:** *Entrepreneurial orientation, Agribusiness entrepreneurs, Performance, Ebonyi state*

## INTRODUCTION

Agricultural sector is the most important sector of the Nigerian economy which holds a lot of potential for the future economic development of the nation as it had done in the past. It is a known fact that agriculture contributed up to 64% to the total GDP in the 1960s but gradually declined in the '70s to 48% and it continues till 2020 (22%) as a result of the Nigerian mono-cultural economy based on oil (Oyaniran, 2020). Notwithstanding the agricultural sector being relegated to the background, agribusiness entrepreneurs have remained the principal actors in agricultural production amidst challenges such as lack of access to finance, insufficient supply to meet population growth and food demand, absence of value addition and supply-chain linkages, resource shortages, outdated system of agriculture among others (Oyaniran, 2020). They are sources of new ideas or innovators and bring new ideas to the market by replacing old ones with new inventions (Borowski, 2021). The involvement of the agribusiness sector in the economy of Nigeria demonstrates that it is a strategic mechanism for economic growth and development. The performance of agribusiness enterprises and their continuity in the most varied activities depend on a complex set of variables and these variables which Entrepreneurial orientation contributes to successful entrepreneurship (Aloo et al, 2022).

Entrepreneurial orientation (EO) originally conceptualized by Miller (1983) has been acknowledged as a key factor for a firm's growth and profitability (Zarrouk et al., 2020). The three dimensions of EO- High adoption of Innovativeness, risk-taking, and pro-activeness are seen as key ingredients to the success of firms (Mwai et al., 2018). Identification and pursuit of opportunities as the core of agricultural entrepreneurship emphasizes the creative, proactive, and networking aspects of entrepreneurial activity (Ashish, 2015). Aloo et al,( 2022) stated that successful entrepreneurial orientation addresses the entrepreneur's ability to discover new ideas that help in the development of new highly demanded products, project business future through pro-activeness which enables entrepreneurs to discover new market opportunities, and have a competitive advantage, and ability to take up some risks that have indecisive incomes but with an interest of obtaining high returns that contribute towards positive growth of business enterprises. Perera et al., (2019) acknowledged that Entrepreneurial Orientation (EO) is a key determinant of a firm's growth, profitability, and longevity thus an important driver for business performance and a core ingredient for the triumphant performance of agribusiness. EO shapes how entrepreneurs exploit opportunities by infusing innovativeness, pro-activeness, and risk-taking (the three EO dimensions) into the firm's activities (Aloo et al., 2022; Perera et al., 2019). EO can also enable a tool for the development of agribusiness by increasing revenues, increasing profits, and developing products, services, and new processes which can bring a competitive sustainable edge (Zarrouk et al., 2020). Thus, being entrepreneurially oriented and being able to run a business are key elements to having good performance in the agribusiness sector (Aloo et al., 2022).

Despite the importance of the agribusiness sector towards the contribution to the economy, it has been difficult for agribusiness entrepreneurs to survive and thrive due to poor performance which arises from several challenges (Oyaniran, 2020). The persistent poor performance among agribusiness entrepreneurs could be solved by adopting Entrepreneurial Orientation strategies. Although it has been established that EO is positively correlated with overall agribusiness performance (Kabiri & Mokshapathy, 2013), some literature finds little or no relationship between

EO and agribusiness performance with insignificant studies of such in the study area and this necessitates further investigation to ascertain the effect of entrepreneurial orientation on the performance of agribusiness entrepreneurs in Ebonyi State, Nigeria.

## METHODOLOGY

The study was carried out in Ezza South Local Government Area of Ebonyi State, Nigeria which is one of the thirteen LGAs in Ebonyi State, and it is centrally located in Ebonyi Central Senatorial Zone. Ezza people are mostly farmers and they produce food items such as rice, vegetables, yam, cocoyam, sweet potato, plantain, cassava, and fruits.

**Sampling and sampling techniques:** Primary data were collected using a well-structured questionnaire and oral interviews. The respondents were selected through a multi-stage random sampling method. In the first stage, two agricultural zones were randomly selected, viz Ebonyi North and Ebonyi South agricultural zones. Second, one local government area from each selected agricultural zone was randomly sampled (Ezza South LGA from Ebonyi North and Ivo LGA from Ebonyi South respectively). Furthermore, from each of the selected LGAs, two communities (Amagu and Ezzama and, Amasiri and Ishagu respectively) were sampled randomly. Lastly, twenty-five agribusiness entrepreneurs were randomly sampled from each of the four communities selected. A sample size of one hundred agribusiness entrepreneurs was used for the analysis.

**Model specification:** The regression analysis was used to compare the relationship between each entrepreneurial orientation construct and performance. To determine the entrepreneurial orientation of agribusiness entrepreneurs in the study area, 16 statements depicting the three entrepreneurial orientation constructs namely: Innovativeness, Pro-activeness, and Risk-taking were used. The participants had to indicate to what extent he/she agreed or disagreed with the statements. The statements were measured on a 5-point Likert scale, which varied from 1 (indicating that the respondent strongly disagrees) to 5 (indicating that the participant strongly agrees with the statement).

The entrepreneurial orientation (innovativeness, risk-taking propensity, and Pro-activeness) as an independent variable was regressed against the performance of the business. This provided the magnitude and direction of the relationship between each construct and business performance.

The multiple regression model is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \dots\dots\dots(1)$$

This equation shows the relationship between the ordinary predictors  $X_1$  to  $X_3$  which are the major three entrepreneurial orientation dimensions and the business performance which is  $Y$ .

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 Z + \varepsilon \dots\dots\dots(2)$$

This equation shows the effect of moderator Z which is the education level of the agribusiness entrepreneurs alongside the three entrepreneurial dimensions and how they affect the performance of the business.

Where:

Y = performance of agribusiness entrepreneurs (profit in naira)

$\beta_0$  = a constant that represents the performance of agribusiness entrepreneurs when the independent variable under consideration (EO) is zero.

$X_1$  = entrepreneurs innovativeness index (grand mean)

$X_2$  = entrepreneurs Pro-activeness index (grand mean)

$X_3$  = entrepreneurs' risk-taking propensity index (grand mean)

Z = moderating variable which is the education level of the entrepreneur (years)

$\beta_1$ ,  $\beta_2$ , and  $\beta_3$ , represent the coefficients of  $X_1$ ,  $X_2$  and  $X_3$ .

$\beta_Z$  = coefficient of the moderating variable Z

$\epsilon$  represents the error term.

## RESULTS AND DISCUSSION

### Degree of entrepreneurial orientation dimensions

Result in Table 1 shows the estimate of the degree of entrepreneurial Innovativeness of Agribusiness entrepreneurs

Table 1 indicates that innovativeness is supported by the mentioned variables as factors that significantly contribute to business performance through the values of the mean and standard deviation. They showed the level of respondents, not differing much in their responses. So, they strongly agreed, except for one variable (Gathering of funds to implement new ideas) that had a mean of less than three. The result implied that all variables, except one, were positive and strong to indicate innovativeness as the dimension of entrepreneurial orientation. The skewness and kurtosis coefficients were indications that the data were normal. The findings agree with Gilbert, (2019) and Kiprotich et al. (2015) who refer to innovativeness as the firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes and that a good entrepreneur must be innovative since the development and growth of the business depend on the entrepreneur's innovativeness and creativity.

**Table 1: Estimate of degree of Entrepreneurial Innovativeness**

Entrepreneurial Innovativeness	Mean	Std.Deviation	Skewness	Kurtosis
Searching for new processes, technologies, and techniques	3.710	.7561	-2.607	5.740
Gathering of funds to implement new ideas	2.320	1.6930	.808	-1.129
Always the first to promote new ideas to others	3.130	1.4117	.117	-1.422
Generation of creative ideas	3.160	1.0418	.055	-.637
Development of new plans to execute new ideas on time	3.240	1.0836	-1.078	-.156
<b>Grand mean</b>	<b>3.112</b>	<b>1.197</b>	<b>-0.541</b>	<b>0.4792</b>

Source: Field survey; 2019. Decision means  $\bar{X} \geq 3.0$

Results in Table 2 show the estimate of the degree of entrepreneurial proactiveness of Agribusiness entrepreneurs. The study also sought to assess the dimension of proactiveness. The grand mean score for the dimension of proactiveness of agribusiness entrepreneurs was 3.488. The findings imply that entrepreneurial proactiveness was one of the key drivers of entrepreneurial orientation which significantly contributed to agribusiness performance in the study area. This result in line with Achtenhagen, (2020), who argued that pro-activeness is critical to an entrepreneurial orientation and is based on an entrepreneur's reaction to opportunities in the marketplace.

**Table 2. Estimate of Degree of Entrepreneurial Proactiveness**

Entrepreneurial Pro-activeness	Mean	Std.Deviation	Skewness	Kurtosis
Always seeing new business opportunities before others	3.020	1.3482	-.744	-1.373
Making things happen regardless of the circumstance	2.990	1.4873	.262	-1.474
Have the best ways of doing things at work	4.030	.6269	-3.033	15.213
Always Finding a solution before it is too late	4.030	.6269	-3.033	15.213
Always use different promotional methods	3.860	.4928	-3.414	10.183
Making ideas win among other oppositions	4.750	.7833	-3.257	9.902
<b>Grand mean</b>	<b>3.488</b>	<b>1.022</b>	<b>-1.052</b>	<b>4.889</b>

Source: Field survey; 2019. Decision mean  $\bar{X} \geq 3.0$

### Estimate of the Degree of Entrepreneurial Risk-Taking

Table 3 indicates that risk-taking was supported by the stated sub-variables within as factors with significant contributions to agribusiness performance through the grand mean that is above 3. Also,

the values of the mean and standard deviation showed the level of respondents did not differ much in their responses. So, they strongly agreed, except for the sub-variable “Agribusiness is risky and should be avoided” which had a mean of less than 3. The result implied that most of the sub-variables stated were strong predictors of the risk-taking attitude of agripreneurs as the dimension of entrepreneurial orientation. This result is in line with Aloo et al., (2022) who found that the risk-taking dimension is positively related to performance.

**Table 3. Estimate of the Degree of Entrepreneurial Risk-Taking**

<b>Risk Taking</b>	<b>Mean</b>	<b>Std.Deviation</b>	<b>Skewness</b>	<b>Kurtosis</b>
Engage in calculated risky investments/projects	4.030	.2629	1.337	11.760
Investing in unexplored technologies and opportunities	4.220	1.2275	-1.235	-.061
Take great financial risks to seize opportunities that guarantee a steady income	3.050	1.3362	-.793	-1.292
Value new strategies/plans even if we are uncertain it will work.	3.920	.5628	-2.453	10.300
Commit large resources to opportunities that have a probability of costly failure	2.860	1.1461	-.213	-1.281
<b>Grand mean</b>	<b>3.112</b>	<b>1.197</b>	<b>-0.541</b>	<b>0.4792</b>

Source: Field survey; 2019. Decision means  $\bar{X} \geq 3.0$

### Orientation on performance

Ordinary least square Regression result of the effect of entrepreneurial orientation on agripreneurs performance is presented in Table 4

Of the four variables studied, two of the three dimensions of EO: pro-activeness ( $p < 0.001$ ) and risk-taking ( $p < 0.001$ ) with the moderating variable (education ( $p < 0.05$ )) had a positive and significant contribution to the agribusiness performance in the study area. Though innovativeness was positive but was statistically insignificant. Ferreira et al. (2017) and Aloo et al., (2022) in a related study reported that for individuals to succeed in any business venture, pro-activeness is needed since business requires an individual’s inner strength and desire to continue regardless of the situation and seizing initiative and acting opportunistically in order to shape the environment. The result is also in line with Pratono (2018) who not only confirmed the positive impact of risk-taking behavior on firm performance but also identified that the impact of risk-taking behavior on firm performance is more effective at the low information technological turbulence than at the high one. Also, Ifeanyi et al. (2021) in Entrepreneurial Orientation and Performance of Selected SMEs in Southeast,

Nigeria found that pro-activeness, innovativeness, and risk-taking of the SMEs exert a high level of influence on the sales growth of SMEs in Southeast, Nigeria.

**Table 4: OLS estimate on effect of entrepreneurial orientation on performance**

Variable	Coefficient	Std. Error	Z-value
(Constant)	44132.622	30854.182	1.430
Innovativeness (X <sub>1</sub> )	1186.794	5677.441	.209
Pro-activeness (X <sub>2</sub> )	147604.8	49754.37	2.97***
Risk taking (X <sub>3</sub> )	2992.987	662.065	4.521***
Education (X <sub>4</sub> )	2419.469	855.096	2.829**
R <sup>2</sup>	0.731		
R <sup>-2</sup>	0.428		
Std. Error of the Estimate	39012.925		
F-ratio	2.107**		

**Source: Field survey 2019.** \*\*\* Significant at 1%, \*\* Significant at 5%, \* Significant at 10%

This result is also in congruence with the study of John, Micheal, and Cassiu (2017) which was designed to investigate the survival strategies for small and medium-scale enterprises in Africa with particular reference to Nigeria and the result reveals that the variables of entrepreneurial orientation (Innovation, risk-taking and pro-activeness) have a significant positive influence on SME's survival and performance of SMEs. This means that entrepreneurs with high entrepreneurial orientation have more chances to gain benefit from the services. Also, Aloo et al., (2012), showed that the EO had a positive influence on the financial performance of agro-dealers firms in Kenya.

Educational level was statistically significant and showed a positive effect on the performance of agribusiness entrepreneurs in the study area. The implication of this result is the ability to understand and apply new techniques and innovations that could improve agribusiness entrepreneurship and boost food security. Improved education level brings about positive changes in knowledge, attitude, and skills through the application of entrepreneurial orientation dimension in their business venture. This is desirable because the level of education of entrepreneurs not only increases their performance but also enhances their ability to understand and evaluate new agribusiness techniques.

## **CONCLUSION AND RECOMMENDATIONS**

The grand mean result of the degree of innovativeness, pro-activeness, and risk-taking dimensions of entrepreneurial orientation was greater than three ( $\geq 3$ ), showing that the three EO dimensions studied significantly contributed to agribusiness performance in the study area. From the regression result, pro-activeness and risk-taking were statistically significant factors that positively exerted a high degree of influence on the agribusiness entrepreneurs' performance in the study area.

Based on the above findings, the study concluded that the application of EO constructs leads to an increase in agribusiness performance and, as such recommends the creation of more awareness to embrace entrepreneurial orientation dimensions by agribusiness entrepreneurs in the study area to increase their profit. Also, since education was positive and statistically significant at 1%, it is recommended that the government should take advantage of their literacy level to organize training, workshops, and seminars to position the entrepreneurs well to tackle the emerging challenges in the agribusiness sector.



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