

Gender Differentials in Entrepreneurial Personality Traits Levels of Farmers in Akwa Ibom State, Nigeria

***Obot U Obot, *Unyime R. Etuk ** Mfon. U Etuk
and *Emmanuel E. Umoh**

*Department of Agricultural Economics and Extension, University of Uyo,
**Department of Accounting, Faculty of Management Sciences, Akwa Ibom State
University, Akwa Ibom State, Nigeria.

Corresponding Author's e-mail: unyimeetuk2021@gmail.com or
unyimeetuk@uniuyo.edu.ng

DOI: 10.56201/wjeds.v9.no3.2024.pg14.29

Abstract

This study was conducted to assess the Entrepreneurial Personality Traits of Male and Female Farmers in Akwa Ibom State, Nigeria. The specific objectives for addressing the main objectives were to examine the profile of male and female farmers by type of agricultural entrepreneurial activities, examine the profile of respondents by information sources for agricultural entrepreneurship activities, assess the respondents by their motivation for entrepreneurship and assess the entrepreneurial personality traits (EPTs) of agro- entrepreneurship possess by the male and female farmers in Akwa Ibom State. Eighty six (86) males and sixty-four (64) female respondents were selected for the study using a multi-stage sampling procedure. Descriptive and inferential statistics such as means, frequencies, percentages, Z-Test and cluster analysis were applied to analyze the data for this study. From the results, the major types of agricultural entrepreneurship activity carried out by the male respondents was poultry farming (30.2%) while melon farming constituted the major agricultural entrepreneurial activity for the female farmers (12.5%) in the study. The major sources of information of agricultural entrepreneurship were extension agents (48.8% and 39% respectively) for both male and female respondents. The primary motivation for entrepreneurship recorded by the respondents was recognition of business opportunity (44.2%) and personal intention (48.4%) for both male and female respondents respectively. Z-test result on the difference in the EPTs of male and female entrepreneurs in the study area showed that there was a significant difference in all the six personality traits adopted for this study (Passion, Openness to Experience, Resilience, Strong Sense of Self-Confidence, Conscientiousness and Vision). The result further shows that members of cluster 2 (average EPT level) formed the majority in the entire respondents and female farmers were more involved in this group than male farmers. Among other recommendations, this study recommended that the gap in entrepreneurial personality traits of the respondents can be brought closer through adequate training programmes, awareness and education to enhance entrepreneurship spirit amongst the farmers.

Keywords: *Entrepreneurial Personality Traits, gender, farmers*

1. INTRODUCTION

Current approaches to economic development have experienced increased focus on entrepreneurship stemming from the realization that the activities of entrepreneurs in the small and medium enterprises (SMEs) act as the powerhouse of economic development (Vossenber, 2013, Sarker and Palit, 2014; Ogidi, 2014, United Nations, 2014, Etuk *et.al.*,2016). Entrepreneurship has been expressed as the productive process of engaging various factors to create gradual wealth by individuals who are willing to take risks in order to provide valuable products and services (Shailesh et al, 2013). These individuals are known as entrepreneurs. Entrepreneurs are known to produce wealth through the establishment of new businesses, innovations, speeding up structural changes and provision of unique products or services (Dogan, 2015, Kew, 2015). The product or service offered by the entrepreneur may not necessarily be a new one but as value infused into it by the entrepreneur (Olowa and Olowa, 2015).

The policy makers and stakeholders in Nigeria have made attempts at improving economic growth in the country through the encouragement of increased participation in entrepreneurial activities and establishment of various entrepreneurial development programmes (Ministry of Industry, Trade and Investment, 2014). Olowa and Olowa (2015) Etuk *et. al.* (2016) and Akpabio *et. al.* (2021) pointed out that there are two dimensions or approaches towards the development of entrepreneurial skills of farmers. The first approach involves altering the socio-economic, socio-political and social cultural frameworks that obstruct the entrepreneurial capabilities of the farmers and promoting those that encourage their entrepreneurial capacities. The second approach involves boosting the personality traits and capacities of the farmers to rekindle heir entrepreneurial spirits. Another study by Qosja and Druga (2015) posited that the entrepreneurial participation and intention of people is dependent on three dominant factors: contextual factor, demographic attributes of the people involved and their personality traits. Personality traits describe the attributes of endurance and predictability of an individual' s behavior which unravels the differences in the actions taken by individuals when they are faced with identical situations (Koe et al, 2010).

The personality of an individual is the totality of his personality traits (Yildiz, 2012). Although a variety of methods have been developed to evaluate personality traits, the Five-Factor Model (FFM) has been extensively applied in entrepreneurial researches (Brandstatter, 2011; Yildiz, 2012). This model upholds that the personality trait of an individual is defined by five primary factors as follows: Openness to Experience (O), Conscientiousness, Extraversion (E), Agreeableness (A) as well as Neuroticism (N) (Korner *et. al.*, 2015). The personality trait model designed for this study is based on six characteristics of the farmers: Passion, Openness to Experience, Resilience, Strong sense of self-confidence, Conscientiousness and Vision. These traits were applied to study the entrepreneurial personality of the male and female farmers in the study area.

The most active societies are those that have a large proportion of entrepreneurs coupled with the proper financial structure to motivate entrepreneurial vision which culminates into productive economic activities (Etuk *et. al.*, 2020, Etuk *et. al.*, 2018 and Ashraf, 2017). Given the vital role

of agriculture to the Nigerian economy, both the government private sector and other stakeholders have invested so much resources to assist more farmers improve their agribusiness activities. These stakeholders rarely consider the effect of psychological factors like personality traits on agribusiness creation and successful operation.

The question of the traits that influences entrepreneurship has brought about debate. This debate has provoked the interest of both the academic and business specialists as to the underlying drives an individual who intends to start a business must possess (Ogunsade, 2017). Despite the abundance of academic research on the subject of entrepreneurship, the peculiarity of what drives an individual into entrepreneurship still remains an aspect of interest, especially as it relates to male and female farmers (Robinson and Marino, 2015).

Previous research has persistently shown that some personality traits drive individuals to venture into business (Antoncic *et. al.*, 2015; Espiritu-Olmos and Sastre – Castillo, 2015). Although these results conform to literature from other sectors, they do not reflect on actual agricultural entrepreneurs. Therefore, studies on this topic are necessary in the agricultural sector especially comparative researches relating to the personality traits exhibited by male and female farmers. Gender issues in agricultural entrepreneurship needs a critical review given the dynamic role that female farmers play in the society. Moreover, gender attitudes and personality traits are likely to have beneficial or harmful effects on entrepreneurship such as shrinking the salary gap between male and female entrepreneurs, improve communication between the entrepreneur and workers as well as provide a favourable labour environment within the business enterprise (Muogbo *et. al.*, 2018). Besides, empirical research and evidences emanating from few studies on entrepreneurial development in the agricultural sector (Seyed *et. al.*, 2011; Shailesh *et al*, 2013 and Nwibo and Okorie, 2013) amongst farmers produced mixed results and did not focus on their personality traits as it relates to their gender.

Most studies on entrepreneurship have concentrated on entrepreneurship orientation and education; public partnership in entrepreneurship in Akwa Ibom State such as: Etuk (2021), entrepreneurial orientation among Fish Marketers in Akwa Ibom State, Udoh (2015), Assessment of Resources on Entrepreneurial Skills in Akwa Ibom State; Ugwu, (2015), Quality Assurance Measures for Entrepreneurial Development in Akwa Ibom State; Effiong, (2015), Entrepreneurial Skills possessed by Undergraduates in Akwa Ibom State; Nsa, (2015), Quality Assurances for implementation of Entrepreneurship Programs in Akwa Ibom State; Akpanobong (2015), Private and Public Partnership in Entrepreneurship in Akwa Ibom State and Ukpong and Etuk (2015), Entrepreneurial Education and Financial Management Skills of Small Scale Businesses in Akwa Ibom State. These studies did not clearly show gender participation and EPTs of farmers in Akwa Ibom State. Thus, this study focused on gender differentials in the EPT levels of farmers in Akwa Ibom State. In order to achieve this aim, the following questions were asked: What are the types of agricultural entrepreneurial activities engaged by respondents, where do the respondents source for information on agricultural entrepreneurial activities, what are the motivation factors responsible for respondents' engagement in agricultural entrepreneurial activities and what are the levels of entrepreneurial personality traits of the male and female farmers in Akwa Ibom State, Nigeria.

2. METHODOLOGY

The study was carried out in Akwa Ibom State, Nigeria. The state has the latitudes of $40^{\circ} 32^1$ and $5^{\circ} 33^1$ North and Longitudes $7^{\circ} 25^1$ and $8^{\circ} 25^1$ East (Etuk, 2021). A structured questionnaire was used for the collection of data from 150(64 female farmers and 86 male farmers) respondents with the application of multi- stage procedure from the sample frame of 6 Akwa Ibom State Agricultural Development Programme (AKADEP) zones. Collected data were analyzed with the use of descriptive statistics (frequency, mean, percentage) and inferential statistic (z-test and cluster analysis). Entrepreneurial Trait was operationalised by 6 major variables made up of; passion, openness to experience, resilience, strong sense of self-confidence, conscientiousness and vision. Respondents were asked to use a 3-point likert continuum (Exhibited (2), Moderately Exhibited (1) and Not Exhibited (0).) to give answers to various question items on those 6 variables. Respondents were ultimately categorized into various clusters of entrepreneurial traits.

3. RESULTS AND DISCUSSIONS

Profile of the Respondents by types of Agricultural Entrepreneurial Activities

This section presents the profile of the respondents' agricultural enterprises as presented in Table 1. The result shows that male respondents were moderately involved in poultry farming (30.2%) and fish farming (20.9%). However, the male respondents were lowly engaged in cassava farming (8.1%) , goat farming (8.1%), vegetable and melon farming (7%), agro storage (4.7%), rice farming (3.5%), among others. Table 1 further shows that the female farmers were lowly engaged in all the agricultural enterprises with vegetable farming (16%) and melon farming (12.5%) as the highest engaged agricultural enterprises. Other lowly engaged agricultural enterprises by the female farmers included cassava farming (9.3%), agro- marketing (9.3%), agro-storage (9.3%), poultry farming (7.8%), agro-processing (7.8%), etc.

From the rest presented in Table 1, it can be concluded that there was concentration in a particular agricultural enterprise amongst the female respondents when compared to their male counterparts. This result is further buttressed by the Z-test result which shows that there is a significant difference between the type of agricultural entrepreneurship activities of male and female farmers in the study. The reason for this difference may be attributed to the fact that female farmers were seen as bread winners in the family which makes them highly engaged in all forms of agro-entrepreneurship that can generate funds to cater for family needs. This position is supported by Okwoche (2012).

Table 1: Profile of Respondents by Type of Agricultural Entrepreneurial Activities

Type of Agricultural Entrepreneurship Activities	MALES		FEMALES		Z-Cal	Z-Critical	P Value
	Frequency	Percentage	Frequency	Percentage			
Cassava farming	7	8.1	6	9.3			
Fish farming	18	20.9	4	6.3			
Poultry farming	26	30.2	5	7.8			
Rice farming	3	3.5	2	3.1			
Rabbit farming	2	2.3	3	4.7			
Agro processing	2	2.3	5	7.8			
Agro marketing	2	2.3	6	9.3	2.33	1.98	0.005
Snail farming	1	1.2	3	4.7			
Goat farming	7	8.1	2	3.1			
Vegetable farming	6	7.0	10	16			
Melon farming	6	7.0	8	12.5			
Yam farming	2	2.3	4	6.3			
Agro storage	4	4.7	6	9.3			
Total	86	100	64	100			

Source: Field survey 2021

Information sources of Agricultural Entrepreneurial Activities

Table 2 presents the sources of information n agricultural entrepreneurship activities utilized by the farmers in the study. From the results, the major source of information for both the male and female farmers was extension agents (48.8% and 39% respectively) followed by social media (25.6% for male) and agricultural journals (20.3%) for females. Other less utilized sources of information identified by the male and female respondents were hand bills (9.3% and 9.4% respectively), radio/TV (2.3% and 4.7% respectively). The result from Table 2 has shown that extension agents constituted the major source of entrepreneurship information for both categories of farmers in this study. The implication is that extension agents provide agricultural information that motivates farmers to move from subsistence to commercial farming.

Table 2: Profile of Respondents by Information Source for Agricultural Entrepreneurship Activities

Information Source for Agricultural Entrepreneurship Activities	MALE		FEMALE		Z-Cal	Z-Critical	P-Value
	Frequency	Percentage	Frequency	Percentage			
Radio/TV	2	2.3	3	4.7			

Extension Agent	42	48.8	25	39			
Social Media	22	25.6	6	9.4	2.37	1.98	0.005
Agric. Journal	8	9.3	13	20.3			
Associations	4	4.7	11	17			
Handbills	8	9.3	6	9.4			
Total	84	100	64	100			

Source: Field survey 2021

Motivation for Entrepreneurship

The study investigated into the most influential variables which motivated the respondents to start their own agribusiness enterprises. The results are shown in Table 3 below. For the female respondents, the order of importance were: recognition of business opportunities (44.2%), personal intention (34.9%), exposure to training programme (9.3%), lack of paid employment and advice from NGO/Government/Family (4.7%) as well as contribution to family finance (2.3%). The various motivational drives that the female respondents reported were: personal intention (48.4%), lack of paid employment (23%), recognition of business opportunity (10.9%), contribution to family finance (7.8%), exposure to training/programs (6.3%) and advice from NGOs/Government/Family (3.1%0. From the result obtained by all the respondents, it can be concluded that there was high entrepreneurial motivation in the study.

The major motivation for the male respondents was their ability to recognize business opportunities as opposed to the female respondents who were mostly motivated by personal intention. These two factors are inter-related and the positive identification of these factors may be attributed to the drive for self-realization by the respondents. The implication of this finding is that an increase in the above entrepreneurship drives would automatically improve farmers' motivation in agribusiness enterprises. Other researches which also identified personal intention as the major drive to entrepreneurship are Esiobu et al (2015) and Samuel et al, (2013). Lack of paid employment was also identified as the motivational factor for engaging in entrepreneurship, especially both female respondents. The implication of this finding is that entrepreneurship provides alternative means of livelihood to farming households who are finding it difficult to secure formal/paid employments. This finding is in conformity with similar studies by Olowa and Olowa (2015), Weidinger *et. al.* (2015).

Exposure to training programs was also a major motivational factor towards entrepreneurship in the study. The implication of this result is that the respondents must have learnt that being an entrepreneur is a respectable career choice and comes with several economic and social benefits. These trainings are obtained from various stakeholders such as NGOs, government extension agents, academics, etc. This finding agrees with the result of Asghar *et. al.* (2016) and Samuel *et. al.* (2013).

Moreover, the Z-Test result from Table 3 shows that there is a significant difference in the motivational factors for entrepreneurship amongst the male and female respondents in the study. Similar studies (Dermol and Roz- man, 2014; Fueglistaller and Zellweger, 2014 and Duricova, 2014) observed that the preference for entrepreneurship was relatively higher amongst male respondents than their female counterparts.

Table 4: Distribution of Respondents by Motivation for Agro-Entrepreneurship

Motivation for Entrepreneurship	Male		Female		Z-Cal	Z-Critical	P Value
	Frequency	Percentage	Frequency	Percentage			
Personal intention	30	34.9	31	48.4			
Recognition of Business Opportunity	38	44.2	7	10.9			
Contribution to Family Finance	2	2.3	5	7.8	2.23	1.96	0.005
Lack of Paid Employment	4	4.7	15	23			
Advice from Ngo/Government/Family	4	4.7	2	3.1			
Exposure to Training/program	8	9.3	4	6.3			
Total	86	100	64	100			

Entrepreneurial Personality Traits (EPT) of agro-entrepreneurship

As show in Table 4, six main EPT were formulated for this study. They are: passion, openness to experience, resilience, and strong sense of self-confidence, conscientiousness and vision. For passion, it was found (as presented in Table 4) that “ I feel enthusiastic when I commit extra hours in my business” was the passion trait that had the highest mean value for both the male ($\bar{x} = 1.77$) and female ($\bar{x} = 1.81$) respondents. This was closely followed by “ I always give priority to agro-entrepreneurship” with mean values of 1.64 and 1.79 respectively. The least passion trait identified in the study was “ I approach my business with excitement when sales decline” with mean values of 1.59 and 1.39 respectively.

A closer look at this result shows that the respondents mostly displayed a feeling of enthusiasm whenever they commit extra time to their business, although this trait was displayed more amongst the female respondents. This trait can only stem from deep passion for agro-entrepreneurship. The implication of this result shows that the respondents have the traits of entrepreneurs because a similar study by Mokhtar, (2017) opined that entrepreneurs are known to dedicate long hours to their businesses.

Data that form the EPT for openness to Experience (as presented in Table 4) indicates that the mean value for “ I take full responsibility for my business” was the highest for both the male ($\bar{x} = 1.96$) and female ($\bar{x} = 1.75$) respondents, although this trait was higher for the male respondents. This was closely followed by “ I have in-depth knowledge of my business” ($\bar{x} = 1.74$) for both categories of respondents) and “ I have adequate years of experience” with mean values of 1.56 and 1.59 respectively. From this result, the major trait on openness to experience in this study was the ability of the respondents to take full responsibility for their businesses. This result shows that the respondents attach premium value to their businesses because no

employee can understand the vision and goals of a business better than the entrepreneur. For this reason, committing the full responsibilities of the business into the hands of the employees can run down the business within the shortest possible time.

In depth knowledge of the business was also pointed out as highly exhibited entrepreneurship trait in this study. The implication of this result is that the respondents understand the nitty-gritty of their businesses which is a vital ingredient to operating a successful enterprise. Adequate knowledge about a business operation has been noted as an important trait for developing a successful and profitable agro-enterprise in a constantly changing business environment (Kahan, 2012). The finding from this study is further supported by Shonubi and Taiwo (2013) that entrepreneurs usually make deliberate attempts to experiment on new ideas in order to acquire new knowledge given that knowledge is a by-product of business success.

Data that form the EPT for resilience (as presented in Table 4) indicates that the mean callus for “ I do not quit in bad times” and “ I possess optimistic tendencies” were similar and the most exhibited for both the male ($\bar{x} = 1.93$) and the female ($\bar{x} = 1.84$) respondents respectively. This was closely followed by “ I possess uncanny ability to get up” with mean values of 1.79 and 1.71 respectively. From this result, it can be seen that the traits of optimism and perseverance abound amongst the respondents. The implication of this result is that despite the uncertain nature of the outcome of agro-entrepreneurship, the respondents were optimistic that they will succeed and they were ready to persevere in the business when they are faced with negative situation. This is a positive trait of agro-entrepreneurship. This finding is in tandem with Usman (2015) that entrepreneurship is an activity where an individual entrepreneur is involved in a venture with high probability of success or failure.

Data that form the EPT for Strong Sense of Self-Confidence (as presented in Table 4) indicates that the mean values for “ Always with self-confidence” were the highest for both the male ($\bar{x} = 2.00$) and the female ($\bar{x} = 1.97$) respondents respectively, with 100% of the male respondents exhibiting this trait. This was followed by “ Self-motivated” ($\bar{x} = 1.95$ and 1.84 respectively) and “ Ability to overcome difficulties” ($\bar{x} = 1.87$ and 1.87). From this result, the respondents exhibited a very high level of self-confidence and self-motivation towards agro-entrepreneurship. The implication of this finding is that high self-confidence can serve as a push into entrepreneurship amongst the male and female farmers in the study area. This result corroborates the finding of Umoh *et. al.* (2013) that there is a positive relationship between self-confidence and poultry farming. However, a contrary result was obtained in a study carried out by Santoso and Oetomo (2016) that self-confidence did not influence the entrepreneurial tendencies of students.

Data that form the EPT for Conscientiousness (as presented in Table 4) indicates that the mean values for “ I always set goals for myself” were the highest for both male ($\bar{x} = 1.92$) and female ($\bar{x} = 1.78$) respondents respectively, although this trait was highly exhibited amongst the male respondents than the female. This trait was followed by “ I do not procrastinate” ($\bar{x} = 1.77$ and

1.75 respectively) and “ I am always result-driven ($\bar{x} = 1.77$ and 1.75 respectively). From this result, the respondents have expressed conscientiousness by setting goals for their agro-enterprises. Goal setting is a very vital because it helps the farmers to focus and not get distracted easily. This is a very important trait for successful entrepreneurship.

Data that form the EPT for vision (as presented in Table 4) indicates that the mean values for “ I easily recognize opportunities” was the highest for the male respondents ($\bar{x} = 1.98$) but the least for the female respondents ($\bar{x} = 1.89$). On the other hand, the traits for “ I always think about the future success of my business” ranked higher for the female respondents ($\bar{x} = 2.00$) than their male counterparts ($\bar{x} = 1.89$). From this result, the male respondents exhibited traits for easy recognition of business opportunities. This result may be due to the financial responsibilities that the male has to fulfill which requires than to seek proactive solutions to their financial challenges. This result conforms to earlier result in Table 3 where the male respondents indicated that their major motivation towards entrepreneurship was the recognition of business opportunities. The female respondents also highly exhibited this trait, although it was higher for the male respondents. This finding is in line with the study of Omolara (2018) that one of the important characteristics/traits of an entrepreneur should include foresight and the ability to identify opportunities.

Table 4: Distribution of Respondents by Entrepreneurial Personality Traits of Agro-Entrepreneurship

S/N	Entrepreneurial Traits	Male				Female			
		EX	MX	NX	\bar{x}	EX	MX	NX	\bar{x}
A	Passion	f(%)	f(%)	f(%)		f(%)	f(%)	f(%)	
i	I always give priority to agro entrepreneurship.	55 (64)	31 (36)	0 (0)	1.64	51 (79.7)	13 (20.3)	0 (0)	1.79
ii	I feel enthusiastic when I commit extra hours in my business.	67 (77)	19 (22.1)	0 (0)	1.77	52 (81.3)	12 (18.8)	0 (0)	1.81
iii	I approach my business with excitement when sales decline.	59 (68.6)	19 (22.1)	8 (9.3)	1.59	35 (54.7)	19 (29.9)	10 (15.6)	1.39
B	Openness to Experience								
i	I have adequate years of experience.	48 (55.8)	38 (44.2)	0 (0)	1.56	38 (59.4)	26 (40.6)	0 (0)	1.59
ii	I have in-depth knowledge of my business.	67 (77)	16 (18.6)	3 (3.5)	1.74	47 (73.4)	17 (26.6)	0 (0)	1.74
iii	I take full responsibility for my business.	83 (96.5)	3 (3.5)	0 (0)	1.96	48 (75)	16 (25)	0 (0)	1.75
C	Resilience								

i	I do not quit in bad times.	80 (93)	6 (7)	0 (0)	1.93	54 (84.4)	10 (15.6)	0 (0)	1.84
ii	I possess uncanny ability to get up.	68 (79)	18 (20.9)	0 (0)	1.79	45 (70.3)	9 (29.7)	0 (0)	1.71
iii	I possess optimistic tendencies.	80 (93)	6 (7)	0 (0)	1.93	54 (84.4)	10 (15.6)	0 (0)	1.84
D	Strong Sense of Self-Confidence								
i	Always with self-confidence.	86 (100)	0 (0)	0 (0)	2.00	62 (96.9)	2 (3.1)	0 (0)	1.97
ii	Self-motivated.	82 (95)	4 (4.7)	0 (0)	1.95	54 (84.4)	10 (15.6)	0 (0)	1.84
iii	Ability to overcome difficulties.	75 (87.2)	11 (12.8)	0 (0)	1.87	56 (87.5)	8 (12.5)	0 (0)	1.87
E	Conscientiousness								
i	I always set goals for myself.	79 (91.9)	7 (8.1)	0 (0)	1.92	50 (78.1)	14 (21.9)	0 (0)	1.78
ii	I do not procrastinate.	66 (76.1)	20 (23.9)	0 (0)	1.77	48 (75)	16 (25)	0 (0)	1.75
iii	I am always result driven.	68 (79.1)	18 (20.9)	0 (0)	1.77	45 (70.3)	19 (29.7)	0 (0)	1.70
F	Vision								
i	I easily recognize opportunities.	84 (97.7)	2 (2.3)	0 (0)	1.98	57 (89.1)	7 (10.9)	0 (0)	1.89
ii	I always think about the future success of my business.	79 (91.9)	7 (8.1)	0 (0)	1.89	64 (100)	0 (0)	0 (0)	2.00
iii	I always think about the future.	86 (100)	0 (0)	0 (0)	1.95	64 (100)	0 (0)	0 (0)	2.00

Source: Field Survey, 2021.

Key: EX = (Exhibited), MX = (Moderately Exhibited) NX = (Not Exhibited), \bar{x} = (Mean), f = (Frequency) and % = (Percentage)

Levels of EPT

From Table 5, the cluster analysis was applied to group the respondents into three (3) clusters based on their level of EPT. This implies that the 150 respondents (64 females and 86 males) were adequately classified into three groups of high, medium and low EPT levels. For cluster1 which was classified as high EPT level. This cluster consisted of 4 (4.65%) membership for males and 7 (10.93%) membership for females. This cluster had the highest mean index stock of

0.76 for males and 0.81 for females. By implication, members of this cluster had a high EPT level also an indication that female farmers were more involved in this group than male farmers.. Cluster 2 was classified as medium EPT level. The membership of this cluster were 44(51.16%) for males and 39(60.94%) with the mean index stock of 0.51(males) and 0.61 (females). Members of this group were considered as having an average EPT level and they formed the majority in the entire respondents. This is an indication that female farmers were more involved in this group than male farmers. By implication, both male and female farmers in the study area were classified under average EPT level, indicating that a need for more trainings on entrepreneurship for farmers to possibly boost their EPT level. In the third cluster, membership was characterized with weak and low EPT level. This was composed of 38(44.19%) membership for males and 18(28.13%) membership for females. It is an indication that male farmers were more involved in this group than female farmers. Members of this group were more vulnerable to low EPT level.

Table 5: Summary statistics of cluster levels of EPT

Clusters	Number of cases		Percentage (%)		Range of stocks	Mean index stocks		Status levels
	Males	Females	Males	Females		Males	Females	
1	4	7	4.65	10.93	0.68-1.00	0.76	0.81	High
2	44	39	51.16	60.94	0.34-0.67	0.51	0.61	Average
3	38	18	44.19	28.13	0.01-0.33	0.26	0.31	low
Total	86	64	100	100	0.01-1.00	1.53	1.73	

Conclusion

The study concluded that members of cluster 2 (average EPT level) formed the majority in the entire respondents and female farmers were more involved in this group than male farmers. . Seconded by cluster 3(low EPT) and male farmers were more involved in this group than female farmers. The last was cluster 3(high EPT) and female farmers were more involved in this group than male farmers. There was a significant difference in the entrepreneurial personality traits for both categories of the respondents.

Recommendations

Based on the findings of this study, the following recommendations were made:

- Some of the female entrepreneurs mostly engaged in agricultural production for family consumption rather than sales. There is need for increased awareness of the entrepreneurial benefits, in terms of income generation, for the female farmers to encourage them move from subsistence farming into commercial agriculture.

- The major source of information on entrepreneurship to the respondents was extension agents. Other means of communication including the social media as well as local radio and television stations should be harnessed to spread the awareness on agricultural entrepreneurship in order to attract more farmers and investors into agricultural investments.
- Recognition of business opportunity and personal intention were the major motivation for agro-entrepreneurship identified in the study. More entrepreneurs should be encouraged/motivated to venture into agribusiness by making agricultural loans easy to access through reduction interest rate and minimizing loan application requirements and procedures.
- There was a significant difference in the entrepreneurial personality traits exhibited by the male and female respondents in the study. The gap in entrepreneurial personality traits of the respondents can be brought closer through adequate training programmes, awareness and education to enhance entrepreneurship spirit amongst the farmers.

REFERENCES

- Akpabio, I. A., Etuk, U. R., and Akpheokhai, L. I. (2020) The Fourth Industrial Revolution and Agricultural Development in Nigeria, in: Udom, N. G., Akpabio, I. A., Akpheokhai, L. I., Etuk, U. R., Ebong, V. O., Ekot, M. O (Eds). *Agricultural and Allied Variables for Sustainable Development in Nigeria*. Publication of Faculty of Agriculture, University of Uyo Pp 1-21
- Akpanobong, U. (2015). Private and Public Partnership in Entrepreneurship in Akwa Ibom State. *Journal of Education, University of Uyo, Uyo, Akwa Ibom State*. 8(1): 195-19
- Antoncic, B., Kregar, T., Singh, G., and DeNoble, A. (2015). The Big Five Personality-Entrepreneurship Relationship: Evidence from Slovenia. *Journal of Small Business Management*, 53(3): 819-841.
- Asghar M.Z., Hakkarainen, P.S. and Nada, N. (2016). An Analysis of the Relationship between the Components of Entrepreneurship Education and the Antecedents of Theory of Planned Behavior. *Pakistan Journal of Commerce and Social Sciences* 10 (1): 45-68.
- Ashfar M.(2017) Editor' s Picks Entrepreneurship : Engine of Growth.1-7. The Nation. Available: <http://nation.com.pk/09-Jun-2017/entrepreneurship-engine-of-growth> Accessed on 10th July, 2020.
- Brandstatter, H. (2011). Personality Aspects of Entrepreneurship: A Look at Five Meta-Analyses. *Personality and Individual Differences*, 51(3), 222-230.<https://doi.org/10.1016/j.paid.2010.07.007>

- Dermol, V. and Rozman, L. (2014). Entrepreneurship Education for Sustainable Economy. International School for Social and Business Studies, *IDEAS* 9 (3):605-614.
- Doğan, E. (2015). The Effect of Entrepreneurship Education on Entrepreneurial Intentions of University Students in Turkey. *EkonometriVeIstatistik* 5 (1):79-93.
- Duricova, V. (2014). Entrepreneurship in Urban and Rural Areas in the EU. Technical University of Kosice. Kosice. Slovakia. 5th Central European Conference in Regional Science, Proceedings. 198-204pp.
- Effiong, N. (2015). Entrepreneurial Skills Possessed by Undergraduates in Akwa Ibom State. *Journal of Education*, 8(1):167-168
- Esiobu, N. S., Onubuogu, G. C. and Ibe, G. O. (2015). Analysis of Entrepreneurship Development in Agriculture among Arable Crop Farmers in Imo State, Nigeria. *International Journal of African and Asian Studies*, 7: 92-99.
- Espiritu-Olmos, R., and Sastre-Castillo, M.A. (2015). Personality Traits versus Work Values: Comparing Psychological Theories on Entrepreneurial Intention. *Journal of Business Research*, 68, 1595-1598.
- Etuk, U. R. (2021) Entrepreneurial Orientation and Level of Participation in Agri-preneurship Operations among Fish Marketers in Akwa Ibom State, Nigeria. *Journal of Agricultural Economics and Extension and Science* 7(1) 35-48
- Etuk, U. R. Jonah, K.E. and Okorie N. G. (2020) Gender analysis of livelihood diversification strategies used by Rural Farmers in Akwa Ibom State, Nigeria. *Journal of Agricultural Economics , Extension and Science* 6(2) :119-128
- Etuk, U, R, Okoro, N and Umoren, E (2018) Analysis of Youth Participation of Community Development Activities of West Africa . Agricultural Productivity program me in Akwa Ibom State Nigeria. *Nigerian Journal of Rural Sociology* 18(1) : 79-89.
- Etuk, U. R, Ukpong, U. N. and Okorie, N. (2016). Assessment of Resettled Beneficiaries Benefits Derived from Vocational Skills Acquisition Initiative of National Directorate of Employment in Akwa Ibom State, Nigeria. *Journal of Forestry, Environment and Sustainable Development*. 2(2):118-126.
- Fueglistaller, S. P. and Zellweger, T. U. (2014). Student Entrepreneurship across the Globe: A Look at Intentions and Activities. Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen. 60pp.
- Kahan, D. (2012). *Entrepreneurship in Farming*. Farm Management Extension Guide. Food and Agriculture Organization of the United Nations: Rome. 136pp.

- Kew, J. (2015). *Africa's Young Entrepreneurs: Unlocking the Potential for a Brighter Future*. International Development Research Center, Canada. 72pp.
- Koe, J., Nga, H., and Shamuganathan, G. (2010). The Influence of Personality Traits and Demographic Factors on Social Entrepreneurship Start Up Intentions. *Journal of Business Ethics*, 95, 259-282.
- Korner, A., Czykowska, Z, Albani, C, Drapeau, M, Geyer, M and Brachler, E (2015). Efficient and Valid Assessment of Personality Traits: Population Norms of a Brief Version of the NEO-Five Factor Inventory (NEO-FFI). *Archives of Psychiatry and Psychotherapy*, 1: 21-32.
- Ministry of Industry, Trade, and Investment. (2014). *The National Enterprise Development Programme*. Garki, Abuja: Ministry of Industry, Trade, and Investment.
- Mokhtar, A. (2017). A Study of Competencies that Influence Entrepreneur Performance in Retail Business Ventures in Malaysia', DBA thesis, Southern Cross University, Lismore, NSW.
- Muogbo, U. S. and John-Akamelu, C. R. (2018). Gender Consideration and Entrepreneurship in Nigeria: A Study of Business Enterprises in Awka, Anambra State. *International Journal of Entrepreneurship and Development Studies (IJEDS)*, 2 (1): 45 – 54.
- Nsa, S. (2015): Quality Assurance for Implementation of Entrepreneurship in Akwa Ibom State. *Journal of Education*, 8(1): 211-214.
- Nwibo, SU. and A. Okorie (2013). Determinants of Entrepreneurship among Agribusiness Investors in South East, Nigeria. *European Journal of Business and Management*. 5(10): 115 – 123.
- Ogidi, A. E. (2014). Women Entrepreneurship and Poverty Reduction. *Journal of Business and Entrepreneurship*, 1 (1): 01 – 08.
- Okwuoche, V.A, Age, A.I, and Alegwu F.O (2012). An Assessment of Youths Participation in Agriculture and Rural Development, Benue State, Nigeria. *Agricultural Journal*, 7(5):365-369.
- Olowa, O. W. and Olowa, O. A. (2015). Factors affecting Entrepreneurship Development in Agribusiness Enterprises in Lagos State, Nigeria. *Global Journal of Management and Business Research*, 15 (7): 24.32.
- Ogunsade, A. I. (2017). The Influences of Institutional Environment on Individual Entrepreneurship Orientation among Nigerian Youths. A Ph.D Thesis submitted to the Faculty of Law, De Montfort University, United Kingdom. Accessed on 10th July, 2020.

- Omolara, E. A. (2018). Entrepreneurial skills and growth of Small and Medium Enterprise (SMEs): A comparative analysis of Nigerian entrepreneurs and Minority entrepreneurs in the United Kingdom. *MPRA Paper* No. 86751.
- Qosja, E., and Druga, E. (2017). Entrepreneurial Spirit and Factors Affecting It: Case Study Based on the Students of the European University of Tirana. *International Journal of Social Sciences and Education Research*, 1(3), 680– 691.
- Robinson, A. and Marino, L. (2015) ‘ Overconfidence and risk perceptions: Do they really matter for venture creation decisions?’ *International Entrepreneurship and Management Journal*, 11(1): 149-168.
- Samuel, Y. A., Ernest, K. and Awuah, J. B. (2013). An Assessment of Entrepreneurship Intention among Sunyani Polytechnic Marketing Students. *International Review of Management and Marketing*, 3(1): 37 -49.
- Santoso, S., Sutedjo, B., Oetomo, D. (2016). Relationship between Entrepreneurial Skills, Entrepreneurial Orientation, and Information Technology to Entrepreneurship Intention: Cases in Indonesia. *International Journal of Management Sciences and Business Research* 5 (4):25-32.
- Sarker, S., and Palit, M. (2014).Determinants of Success Factors of Women Entrepreneurs in Bangladesh-A Study Based on Khulna Region. *Business and Economic Research*, 4(2), 237-250.
- Seyed, J. F., Hosseini, D. and Heidar, A. (2011). Affective Factors Contributing to Entrepreneurial Attitudes of University Students in Iran; *Scholars Research Library Annals of Biological Research*, 2 (2) :366-371.
- Shailesh, K., Gyanendra, S and Yadav, V. K. (2013).Factors Influencing Entrepreneurial Behaviour of Vegetable Growers; *Indian Research Journal of Extension Education*, 13 (1).
- Shonubi, O. K., and Taiwo, S. O (2013). Self-Employed Graduate Entrepreneurs and Management of Small and Medium Enterprises (SMEs) in Lagos State, Nigeria. *International Business and Economics Research Journal*, 12(5), 585-594.
- Udo, A. N. (2015). Assessment of Resources on Entrepreneurial Skills in Akwa Ibom State. *Journal of Education*, 8(1): 51-55
- Ugwu, P. N. (2015). Quality Assurance Measures for Entrepreneurship Development in Akwa Ibom State. *Journal of Education*, 8(1):96-99.
- Ukpong, O. and Etuk, O. (2015). Financial Management Skills of Small Scale Business in Akwa Ibom State. *Journal of Education*, 8(1): 55-57

- Umoh, O.T. Umoh, I. M., Okpongette, O. D. and Otu, E. S. (2013). Entrepreneurial Interest and Self-Efficacy as Correlates to Technical Knowledge in Poultry Farming among Young Adults in Akwa Ibom State. *Academic Excellence* 6:1-12.
- United Nations.(2014). *Entrepreneurship for development*.(Report of the Secretary General No.A/69/330). New York, NY: United Nations General Assembly.
- Usman, D. (2015). Entrepreneurial Education for Youths Development in Gombe State.*Journal of Management and Sustainable Development*, 3(6):64-72.
- Vossenbergh, S. (2013).Women Entrepreneurship Promotion in Developing Countries: What Explains the Gender Gap in Entrepreneurship and How to Close It?(Working Paper No.2013/08). Maastricht: Maastricht School of Management,
- Weidinger, R., Youdeowei, A. and Mwaura, G. (2015).*Agricultural Entrepreneurship: Transforming African Youth Livelihoods through Agribusiness Development*. Nairobi, Kenya. *Issue No. 3*: 232pp.
- Yildiz, S. (2012).The Relationship Between Entrepreneurship Traits and Personality Type: A research in Turkey. *International Journal of Academic Research*, 4 (3), 83-88.