

CORRELATES ANALYSIS OF POULTRY ENTREPRENEURIAL CAPACITY DEVELOPMENT AMONG YOUNG ADULTS IN AKWA IBOM STATE, NIGERIA**Emem Bassey INYANG**Dept of Agricultural Economics and Extension
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Uyo, 520001, Akwa Ibom State, NIGERIA**ABSTRACT**

This study evaluated if entrepreneurial instinct and self-efficacy of young adult within the school system associate with poultry entrepreneurial capacity development in their course of human capital formation in poultry science through agricultural science programme in Akwa Ibom State. Multi-stage sampling procedure was used to collect data from three hundred (300) senior secondary two students across each of the three senatorial districts of Akwa Ibom State. Both descriptive statistics and inferential statistics were used to ascertain the study outcomes. Results showed that 51.3% of the respondents possessed high knowledge of poultry science enterprise. There was a negative relationship between entrepreneurial interest and technical knowledge in poultry farming, which implied that the entrepreneurial interest was not increasing in the dimension with technical knowledge, nevertheless the relationship was not statistically significant. Also, similar result was observed even though there was a positive relationship between self-efficacy and Technical knowledge in Poultry Farming. There was a positive relationship between self-efficacy and technical knowledge in poultry farming. Analysis on variation in technical knowledge in poultry farming by sex revealed that males were more knowledgeable than females and the variation was statistically significant. Overall results indicated that any attempt to enhance the knowledge, skills and experience of young people in agricultural production will have an immediate positive impact on food security. Therefore, for continued adoption of practiced oriented animal agriculture, regular conferences, seminars, workshops, symposia and exhibitions should be organized for teachers in animal agriculture.

Keywords: Young Adults, Entrepreneurial Instinct, Self-Efficacy, Knowledge acquisition, Poultry Enterprise, Capacity Development Farming.

INTRODUCTION

Poultry entrepreneurship does not only reduce poverty but nutritional insecurity and in most developing regions, serve as an outstanding business venture capable of reducing unemployment and serving as essential ingredient in the economic development of any nation. The future food sufficiency status of most sub-Saharan Africa state would likely be threatened if younger generations do not practice agriculture as business. Within sub-Saharan Africa States where there is limited integration of information science and technology to enhance agricultural business to enhance productivity. There is overwhelming tendency of young people moving out of farming enterprises in search of a more comfortable life and better income. According to Sanagorski (2011), the interest of youths in agriculture has been declining. While most developing countries are still experiencing high population growth rates, the youth are migrating in significant numbers to non-agro and allied sectors in the urban areas. This is because of lack of jobs and opportunities in the rural areas and a notion that agricultural activities command low status and do not offer good future prospects Podlinski(2011). Ziebula, Albert, Gevorgyan, Junemann, Mina and Kurshner (2013) reported that young people are the future, even though among them, agriculture is regarded as

unprofitable entrepreneurial task that is best left to uneducated and the elderly. In addition, many of them are leaving their families for an uncertain future in the cities. In similar vein, Kruger (2009) asserted that many youths find it hard to eke a livelihood as small scale farmers and end up in urban areas in search of employment, thereby worsening the unemployment situations and a good number find themselves in crime and other vices.

Livestock entrepreneurial programmes have potentials as poverty reductions tools in most developing nations, including Nigeria FAO (1997). Podlinski (2011) observed that as agriculture is still an important source of income in rural areas, however, investment is needed in special agricultural programmes aimed at attracting more young people. The importance of creating educational opportunities at both basic and tertiary levels is now widely recognized Udoh (2003) and Ukpong (2002). Podlinski (2011) further suggested that being seen as a target group in their own right, the youth should be equipped with the agricultural knowledge to enable them learn new technologies in animal agriculture. Poultry business, a vibrant sector of livestock agriculture, does not only reduce poverty but also eradicates nutritional deficiencies. Poultry production involves small holder rural and commercial urban operators. Management system may be extensive, semi-intensive and intensive FAO (1993). According to Olaiya, Yisa, Adelowo, Aka-Tanimu, and Emmenaa (2013), poultry serves as significant source of quality animal protein from meat and eggs with high biological value than plant proteins. Kehinde, Aguihe and Daniel (2012) also highlighted that poultry provides ready income and development to many households in Nigeria, in addition to having quickest and highest rate of return of investment (short generation), ease of management and small space requirement.

A review of socio-cultural and nutritional benefits of poultry products revealed that poultry products are consumed across several cultural barriers and are devoid of taboos, that poultry products are appreciated for their low cholesterol, abundance of minerals and vitamins and are accepted without social obligations and poultry is relatively free from some pathological, ecological and economic constraints which affect the commercial production of other breeds and classes of livestock in Nigeria Olaiya, Yisa, Adelowo, Aka-Tanimu and Emmenaa (2013) and Olaiya, Yisa, Adelowo, Payi, Udokainyang, Yenle and Adeleke (2014). Economically, poultry business is a dependable source of job opportunities and income-generation Branchaerl (1996), thus becoming an essential ingredient in the economic development of any nation. Drawing from 1999 FAO World Food Day at Rome; with the theme Youth against Hunger, which considerable attention to the significant roles that youth can play in food security was given, Branchaerl (1997) and Worner (2014) emphasized the very important role of training the youths in sustainable agriculture in the sustainable development of the family farms and nations at large. An important lesson from the 1999 World Food Day theme is that given adequate training, education and financial support, young people can become active partners in helping to meet the World Food Summit goals of reducing the number of hungry people with quality proteins by the year 2015(Branchaerl, Gaviria, Jallade and Seiders, 2000).

According to Yaye (2010), young people are no longer passive users of knowledge developed elsewhere but active partners whose innovations, skills, competencies, and initiatives are fully recognized. Yaye (2010) also reported that graduating students from schools have life skills and by applying what they have learnt at schools in their villages, they serve as a model for other communities, thus establishing their multiplier effects. For Africa and Nigeria in particular, there is the looming threat of food insecurity and animal proteins deficiencies. In recent times, poultry production is being eroded by disease outbreaks, poor quality chicks,

poor quality of feed ingredients, prohibitive cost of feed and involvement of quacks as well as concerns about environmental pollution from poultry manures, Adeyemo and Onikoyi (2012) and Agbo (2009). Despite these monstrous challenges, there should be urgent concern by all stakeholders at getting young people to practice animal agriculture as a way of translating the above threats to opportunities. Schools, as observed by Yaye (2010), have the mandate to guide young people towards maturity and therefore can play an important role in promoting learning about agricultural production, nutrition and entrepreneurial skills. They can also serve as a channel for community participation and can provide cost-effective food and nutrition interventions.

Young people in Akwa Ibom State are reached in two ways. One is through Community-based rural youth programmes which target out-of-school rural young people. The other approach is using the rural schools to incorporate agricultural activities as an integral part of the regular curriculum or as extracurricular activities. These schools and community based rural youth programmes deal with poultry production and expose the youth to knowledge and skills related to sanitation, vaccination, housing, adequate nutrition, improved breeds of chickens, predator control and alternative marketing strategies with the aim of making them productive today as well as becoming better livestock men in future. Where proper facilities are available, small-scale poultry projects are carried out on the school farms. Students are made to learn many practical aspects of raising chickens. Apart from schools, in recent years, some NGOs have been involved in creating educational materials on modern poultry production for students and general public. Agbo (2009) highlighted on Songhai experience of having main objective to train young agricultural entrepreneurs and further reported that more than 200 students at any time attend 18 month training programmes in the site of Port Novo, Parakou and more than 500 farms are established and managed by young people trained in Songhai centre.

In addition, Kruger (2009) listed on-farm mentoring as one of the components of agricultural education. On-farm mentoring provides for regular visits by well-experienced and qualified mentors to emerging farmers on the farms. Mentoring is a partnership between two people (mentor and mentee) normally working in a similar field or sharing similar experience. A mentor is a guide who can help a person to find the right direction and who can help the mentee to develop solutions to achieve his/her goals. Khisa (2010) further reported that the field is the school which emphasizes observation, discussion, analysis, collective decision-making, presentation, taking appropriate collective and individual actions, Kruger, (2009). To further advocate for youth involvement in poultry production, Cunningham (2014) and Mammo (2014) stressed the relevance of ICTs in endearing young people with natural affinity to ICTs, which can provide information on new marketing strategies and new production techniques as well as improved and fast-growing breeds. Cunningham (2014) supported his observation with CTA Agricultural Rural Development and Youth in the Information Society Project launched in 2010 that ICTs has had a major impact on information sharing, building capacity in all aspects of ICT innovation and entrepreneurship in agriculture.

However, research findings have emphasized that individual characteristics such as gender, interest, self-efficacy, peer group influence, self-concept and attitude of individuals towards agricultural enterprise and agricultural occupation generally are important factors influencing acquisition of knowledge and participation in agricultural programmes and policy implementations, Sam, (2006), Udoh (2006) and Zimmerman and Schunk (2003). Sanagorski (2011) also reported that despite differences in terms of ethnicity, race, sex, geographic

location, young people all over the world share common opinions and concerns about agricultural vis-à-vis animal production. A case in point is that both in developed and developing countries, youth support and embrace sustainable agricultural practices whether they have had any formal training, experience or exposure to these approaches or not. Udoh (2006) described interest as the desire or willingness to learn or hear more about ideas, innovation, event, work concept, people, places and situation around one's environment. It is one of the core determinants of farmer's participation in agricultural activities, Ukpong (2001) had noted lack of interest as capable of retarding effort, motivation and even the desire to participate in any productive venture vis-à-vis hampering productivity and vocational process. He also indicated that positive interest is a fertile land for the survival and achievement of vocational or professional objectives. Ukpong (2001) further highlighted that interest in poultry farming would influence young adult's acquisition of technical knowledge in poultry farming in the study area.

Self-efficacy in poultry farming is another individual characteristic that the study intends to understand its can influence on young adult acquisition of technical knowledge in poultry farming in the study area. Bandura (1999) explained that self-efficacy determines how people think, feel motivate themselves and even how they behave, he further explained that people with high interest regard or view challenging problems as tasks to be mastered, develop deeper interest in their activities in which they participate, form a stronger sense of commitment to their interest and activities and recover quickly from setbacks and disappointment. On the other hand, people with low self-efficacy avoids challenging task, believe that difficult task and situations are beyond their capabilities. They focus on personal failures and negative outcome and quickly lose confidence and personal abilities. Pajares and Shunk (2001) justified, that self-enhancement scholars believe self-efficacy and other self-belief measures are one of the primary causes of students' achievements; we do well because we feel good about ourselves. Educational researchers recognize that skills and self-efficacy beliefs are so interwoven; one way of improving students' performance is to improve students' self-efficacy, Wiedenbeck, Labelle, and Kain. (2004).

Although some studies have been conducted on issues surrounding interest, self-efficacy and agricultural activities, studies on impact of learning or capacity building from the formal education platform on enterprise startup in poultry production do exist though quite scare but how do these variables affect their acquisition of technical knowledge in poultry production, which are likely to create impact on rate of enterprise startups. In view of the aforementioned, how knowledgeable are these youths on techniques of poultry agriculture? Have they really acquired the expected knowledge and competencies in line with the objectives of the training? There is need to examine the technical knowledge of these youths in poultry farming. Therefore, this study was carried out to examine if entrepreneurial instinct and self-efficacy of young adult within the school system associate with poultry entrepreneurial capacity development in their course of human capital formation in poultry science through agricultural science programme in Akwa Ibom State. Specifically, the study examined the knowledge acquisition level of the respondents on poultry farming, ascertained if there was any association between entrepreneurial instinct and entrepreneurial capacity development in poultry science, also if there was any association between self-efficacy and the capacity development in poultry farming enterprise? Lastly, Could the sex of the respondents have influence on capacity development in poultry enterprise?

METHODOLOGY

This study took place in Akwa Ibom State and it is located between latitudes 4° 32' and 5° 53' North and longitudes 7° 30' and 8° and 25' East with a total land mass of 8,412km² occupying the south-eastern Niger Delta region of Nigeria, AIS (1989). According to Federal Republic of Nigeria Gazette, Akwa Ibom State has a population of 3.92 million people and has three Senatorial Districts, namely: Uyo (Akwa Ibom North East), Ikot Ekpene (Akwa Ibom North West), and Eket (Akwa Ibom South) Districts, Federal republic of Nigeria (2004). All the Senior Secondary School Two (SS2) Agricultural Science Students across the 239 public secondary schools in Akwa Ibom State constituted the population for the study. The population was stratified into three (3) strata based on the three Senatorial Districts. One Local Government Area was randomly selected from each Senatorial District. Two schools were randomly selected from the selected Local Government Area. Fifty (50) responded to a selected from each of the selected schools using intact class. A total of three hundred (300) respondents were obtained from the three Senatorial Districts. Two pretested instruments were developed and used in the study area. One was Poultry Farming Achievement Test; the test was developed to test the knowledge level of respondents on poultry farming activities. The test has twenty (20) multiple choice items focusing on seven different areas of poultry farming such a poultry concepts and terms, housing, reproduction, lighting, sanitation, feeding and vaccination. The test items were generated based on test blue print and was vetted by Animal science lecturers and experts for face and content validity. The test was also subjected to item analysis and Kuder Richardson 20 (KR20) formula reliability analysis. It had a difficulty index range of 0.4 to 0.6 and KR 20 reliability coefficient of 0.82. The second instrument of a two sectioned inventory designed to measure the interest and self-efficacy of the respondents in poultry farming. The interest scale contains eighteen (18) items while the self-efficacy scale contained 15 items. Cronbach alpha formula was adopted to establish the internal consistency and construct validity of the interest scale and self-efficacy scale. The interest scale had a Cronbach alpha of 0.815 while the self-efficacy scale had a Cronbach alpha of 0.850. These figures confirmed that the scales were reliable in achieving the study objectives. The researchers administered the instruments on the respondents in their respective schools. The instruments were administered and retrieved the same day in each school. Descriptive statistics (frequencies, percentages), Pearson Product Moment Correlation (PPMC) and Independent T-test were the statistical tools used to analyze collected data. PPMC was used to test the relationship between two variables while the T-test was used to examine differences between means.

RESULTS

A. Entrepreneurial capacity development level on poultry enterprise among the young adults

Following the administration of the valid test instrument on the respondents to examine their human capital formation on poultry enterprise capacity, which was titled as technical knowledge on poultry farming, the knowledge scores were subjected to percentile ranking and was further categorized into low and high Knowledge level of Poultry Farming (KLPF) based on the criteria that respondents whose scores fell on the 50th percentile and above are highly knowledgeable a while those whose scores fell below the 50th percentile are classed as lowly knowledgeable in Poultry Farming. The results in Table 1 reveal that more than half of the respondents (51.3%) possess high knowledge of Poultry Farming. A sizeable number of them (48.7%) also had low knowledge of poultry farming.

Table 1: Distribution of respondents based on knowledge level in Poultry Farming (KLPF)

KLPF	Respondents	Percentages (%)
Low	146	48.7
High	154	51.3
Total	300	100

Source: Field Survey, 2013.

B. Entrepreneurial instinct and capacity development level in poultry enterprise.

Table 2 showed the results of the correlation analysis to determine the relationship between entrepreneurial instinct and capacity development level in poultry enterprise. There was a negative relationship (results) between entrepreneurial interest and technical knowledge in poultry farming. This means that as entrepreneurial interest was increasing (mean =14.140), while technical knowledge was reducing (mean=13.620). the table also showed that this relationship is not statistically significant $r=-0.17$, $N=300$, $p>0.05$, $R^2=0.34$, explaining that only 34% of the variation in the students' technical knowledge in Poultry Farming can be attributed to entrepreneurial interest in Poultry Farming.

Table 2: correlation between entrepreneurial instinct and capacity development level in poultry enterprise.

Variables	Mean	R	Sig.(2-tailed)	Remark
Instinct	14.140	-0.17	0.768	HO accepted
Knowledge	13.620			

Source: Field Survey, 2013

C. Self-efficacy and capacity development level in poultry enterprise.

Table 3 showed the result of the correlation to determine the relationship between self-efficacy and capacity development in poultry enterprise. There was a positive relationship (result) between self-efficacy and capacity development in poultry enterprise. These means that as self-efficacy was increasing (mean=18.563), poultry entrepreneurial capacity development level was also increasing (mean =13.620). However, the Table 3 showed that this relationship is not statistically significant $r= 0.100$, $N=300$, $p>0.05$, $R^2=0.20$, explaining that only 20% of the variation in students technical knowledge in poultry farming can be attributed to their self-efficacy in poultry farming.

Table 3: correlations between self-efficacy and capacity development level in poultry enterprise

Variables	Mean	R	Sig.(2-tailed)	Remark
Self-efficacy and	18.563	0.100	0.085	H_0 accepted
Knowledge	13.620			

Source: Field Survey, 2013.

D. Variations in capacity development level of adults in poultry enterprise by sex

Table 4 showed that there was significant difference ($p<0.05$) in the poultry entrepreneurial capacity development level of males (mean=14.088) and females (mean=13.221). The mean performance of males (mean=14.088) was significantly higher than that of females (mean = 13.221). The mean difference of 0.86673 observed, was statistically significant at $t_{(298)} = 2.256$, $P<0.05$.

Table 4: Variations in Capacity Development Level of adults in Poultry Enterprise by Sex

Sex	N	mean	df	t-value	Sig.	Remark
Males	137	14.088	298	2.256	0.025	significant
Females	163	13.221				

Source: field survey, 2013

DISCUSSION

With regards to results on Table 1, more than half of the respondents (51.3%) possessed high level of entrepreneurial capacity in poultry science enterprises. It means that more than half of the respondents knew for example after hatching, sexing of chicks into males and females should be done. They also knew that the optimum temperature condition necessary for successful hatching of chicken eggs is 37°-39° C. They further knew that it is necessary to medicate feed or water with coccidiostat or anti-coccidiostat at 3 weeks of age. Besides, they knew that it is important to debeak the chicks during the 1st four weeks if their pullets (young layers). Hence, actual practice of poultry production upon graduation might not be a difficult task. The high human capital formation level of the young adults as found in this study tends to affirm the views of Umoh (2012) that SS2 agricultural science students are relatively young and adventurous. This category of people is inquisitive and willing to learn to add to their knowledge. However, much effort needs to be adopted by stakeholders in the agricultural and educational sectors of the economy in raising the knowledge of those future farmers who were not highly knowledgeable in poultry farming in order to encourage their interest in poultry farming as a means of livelihood.

Udoh (2006) had described interest as the desire or willingness to learn or hear more about ideas, innovation, event, work concept, people, places and situation around one's environment. Ukpong. (2001). also showed that positive interest is a fertile land for the survival and achievement of vocational or professional objectives. With recourse to Table 2, this study showed that there was a negative and insignificant relationship between entrepreneurial interest and capacity development level of the young adults in poultry enterprise. This might be attributed to the fact that these students regard agricultural science (under which poultry farming is taught) as one of the subjects which they must pass whether they are interested or not. All they need to do is to memorize the contents and produce same in the examination hall without proper articulation of enterprise startup and adoption of what they have learnt (role learning is practiced). Also, most of the schools do not organize practical sessions for their students, especially in animal husbandry to expose the students to the possibility of putting theories into practices. This could positively boost their moral and enthusiasm in poultry farming since they would have been enjoying some aspects of the practical sessions and would have known how to actually raise chickens to market weight, produce eggs and young chicks. The result in Table 3 revealed a positive and non-significant ($p>0.05$) between self-efficacy and technical knowledge in Poultry farming. Self-efficacy is a self-belief construct that deals with the perception that one is capable of what is necessary to reach one's goals in terms of knowing what to do and being emotionally able to do it, Pajares and Schunk (2001). It influences how students approach a task such as problem solving, the amount of efforts they exerts and their level of persistence all of which influences students' performance, Copper and Earl (2007) and Dalgety, Coll and Jones (2003). The findings of the study indicate that self-efficacy of the students can substantially influence their achievement if properly harnessed. As earlier noted by Fend and Scheek (2005), teaching strategies used in the classroom can and do make the difference to students self-efficacy. Ipso facto, if the students are always exposed to practical sessions especially in poultry farming and appropriate teaching methods used (through guided demonstration project and field trip methods) Nsa, Akpan and William (2012) and Olatunji (2005), it may improve their perception and involvement in poultry farming as a means of livelihood after their graduation.

With regards to sex based variation in technical knowledge (Table 4), males had higher technical knowledge in poultry farming than females. There might be numerous factors contributing to this result. Even when there were more females than males in the sample, males may have been more knowledgeable because they feel they have more strength and could endure the rigour, stress and hurdles associated with agricultural activities than females. It could also be understood from the point of view that males see themselves as being capable of performing a given task and are likely to work harder to attain and acceptable level of performance in their vocation.

CONCLUSIONS

Poultry entrepreneurial performance like any other business is affected by several constraints which among them are environmental, organizational, individual characteristics and capacity building. Though, there's appeared to be limited empirical evidence of impact of capacity building on entrepreneurial instinct. The teaching of vocational subject showed more good on technical capacity of learners on standard poultry science and management procedure across the population. The male had a higher competency status than female. The high achievements on poultry enterprise knowledge but more than half of the population rather showed an inverse association with entrepreneurial instinct though not statistically significant. This tends to support perception that the high academic achievements shy away most times from entrepreneurship owing to the belief that there is better future for them in the circular economy than the less educated suggesting entrepreneurial attributes of an individual could be induced as a result of self perceived disadvantages within or outside his or her immediate environment. The situation of interaction between self efficacy and technical knowledge hold entirely different scenario as they statistically significant and positively associated, thus, the pattern of critical reasoning and lives of behaviour thus should enhance the entrepreneurial instinct supported by technical proficiency acquisition. Thus, nutrition, employment and revenue to operators, all these have positive multiplier effect of reducing food insecurity and poverty among rural people in Akwa Ibom State, Nigeria. Improvement in production and marketing techniques by poultry stockmen can help them benefit from the rapidly growing demand for livestock products interestingly the respondents in the study showed high knowledge of the poultry farming techniques. It is expected this students upon the acquisition of knowledge will be more interested or involved in poultry farming after graduation. This endeavour encourages their self-reliance and functionality in the society where they reside. On the basis of findings from this study, the under listed recommendation were preferred: agricultural science teachers should be more emphatic with the practical aspects than theoretical in teaching the subjects. They should also always adopt tested and recommended instructional strategies like guided demonstration, Nsa, Akpan, and William (2012), project and field trip method, Olatunji (2005) for effective teaching of the subjects. This may stimulate and promote interest and self-efficacy of students in poultry farming. Agricultural facilities in schools should be upgraded, new ones should be provided in adequate numbers to enhance teaching and learning agricultural skills. These should be provided by the Ministry of Education at all levels, Parents Teachers Association (PTA) and other stakeholders.

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