AGRIPRENEURIAL SKILLS NEEDED BY AGRICULTURAL EDUCATION UNDERGRADUATES FOR ENTRY INTO PINEAPPLE PRODUCTION FOR SELF-EMPLOYMENT IN DELTA STATE

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Abstract
The research aimed to explore Agripreneurial Skills Needed by Agricultural Education Undergraduates for Entry into Pineapple Production for Self-Employment in Delta State" aimed to explore the specific skills required by students for successful involvement in pineapple production, with a view to enhancing self-employment readiness. Two theories were used in this study. They are the Human Capital Theory and Experiential Learning Theory. The study employed a descriptive survey research design. The research was conducted with a sample size of 115 but 111 respondents data collected through a structured questionnaire, which served as the primary instrument, were found usable. For the analysis, descriptive statistics such as mean and standard deviation were used to assess responses to the research questions, while t-tests were employed to test the hypotheses at a 0.05 significance level. The findings reveal valuable perceptions into the readiness and skill level of Agricultural Education undergraduates in Delta State for self-employment in pineapple production. Respondents consistently rated their agripreneurial skills for all stages of production at a moderate level, with no significant mean differences observed between the agripreneurial skills needed and their self-employment readiness across the various hypotheses. In pre-planting, planting, post-planting, harvesting, post-harvest operations, and marketing, respondents agreed on the essential skills required to handle these operations effectively. This indicates that students possess a basic foundation in agricultural production processes. However, the significant t-test values across all hypotheses—accompanied by p-values of 0.001—suggest that there are indeed meaningful differences in how these skills contribute to self-employment readiness, contrary to the initial null hypotheses. Based on the findings the following recommendations were made: **Enhance agripreneurial training programs** by incorporating practical, hands-on experiences into the Agricultural Education curriculum, allowing students to gain real-world skills in all stages of pineapple production**. Encourage partnerships between educational institutions and local agricultural businesses** to offer internships and mentorship opportunities for students, thereby boosting their readiness for self-employment. **Increase access to funding and financial resources** for undergraduates interested in agripreneurial ventures by collaborating with financial institutions and government agencies to provide start-up grants and low-interest loans.

Introduction
Agriculture is the science or practice of cultivating the land and keeping animals for food. It includes the art and science of cultivating the soil, growing crops, and raising livestock as well as the distribution of these and their by-products to the markets. The Food and Agriculture Organization of the United Nations (FAO) defines Agriculture as the science, art, and practice of cultivating plants and raising livestock for food, feed, fibre, fuel, and other valuable products.

Young people often see Agriculture as an outdated unprofitable "hard work". (Montpellier Panel, 2019). Yet this is not the case as Agriculture is a dynamic sector offering many opportunities for entrepreneurship along the entire agribusiness value chain. The English word "Agriculture" is derived from the Latin word "Ager" which means field and "Cultural" meaning to cultivate. These words when combined gives the Latin word "Agriculture" meaning field or land tillage. Until recently, agriculture was considered a simple activity of cultivating land and harvesting crops. However, with the increase in wasteland, depletion of natural resources, increasing migration of rural youths to urban areas, and

negative perception of farming among children of farmers, there is a need to take agriculture to the next level through agripreneurship.

Education is universally recognized as an instrument for social, political, scientific, and technological development and advancement. It is the process of acquiring knowledge, skills, values, or attitudes through various methods such as instruction, teaching, or study. It is a lifelong journey. According to the United Nations Educational Scientific and Cultural Organization (UNESCO) in its "Global Education Monitoring Report 2020" stated that Education is a fundamental human right and essential for the exercise of all other human rights. It promotes individual freedom and empowerment and yields important developmental benefits. World Bank Group, (2020) also stated that Education is the most powerful instrument of reducing unemployment, and poverty and lays the foundation for sustained economic growth. Education refers to the processes that develop a child's abilities and behaviour, which are valuable to society. Education can bring positive changes to our society. The growing concern in recent years about the quality of education offered in Nigerian schools has been particularly focused on the tertiary levels. This is because higher education is a prerequisite for the scientific and technological development of any nation. Higher Education refers to education provided in colleges, universities, and other institutions beyond the high school level. It typically includes undergraduate and post-graduate programs offering specialized knowledge and skills in various academic disciplines. Undergraduate students are individuals who are pursuing their first degree in higher institutions of learning, usually colleges of education or universities typically between the ages of 17-30 years.

Many courses are offered in the universities, one of which is Agricultural Education. Agricultural Education in Nigeria is as old as the Nigerian society itself. This is because it has been in the traditional and pre-colonial Nigerian setting with parents seen as the first agricultural educator. The introduction of Agricultural Education into Higher Education in Nigeria owes its origin to Ashby's commission in 1959 (Ndem & Aneke, 2016).

Agricultural Education in Nigeria is intended to provide Entrepreneurial knowledge and vocational skills necessary for Agriculture, Commercial, and Economic Development (Federal Republic of Nigeria, FRN, 2019). It further stipulates that trainees on completion of their tertiary Education should have three options: "secure employment either at the end of the whole course, or after completing one or more modules of employable skills, set up their own business or become self-employed and be able to employ others". Agricultural Education is designed to lay a solid foundation for vocational Agriculture which is to train individuals to acquire relevant occupational skills, that will prepare them for entry or advancement in Agricultural occupations.

The Federal Republic of Nigeria (2020), stated that the realization of the effectiveness of education as a powerful instrument for national progress and development in Nigeria led to the adjustment of educational philosophy and methodology to match ideals and challenges of the ever-changing economic and social structure of our modern society. The high rate of unemployment continues to increase, more specifically with an increased proportion of unskilled graduates. Graduate unemployment could be attributed to a lack of saleable entrepreneurial skills and knowledge that will enable them to take up available jobs. Nigeria is an agrarian society that needs people who possess Agripreneurial skills to take up various jobs in Agro industries (Ndem & Aneke, 2016). This is because various food crops, fruits, and vegetables such as pineapple, rice, yam, maize, rubber, and oil palm amongst others require special skills for their production.

Agricultural Education is a structured and comprehensive academic program that aims at equipping students with a thorough understanding of the principles and practices of agriculture. This program is designed for individuals who are interested in pursuing a career in teaching agriculture. The program covers a wide range of topics, including crop science, animal science, soil science, agribusiness, and agricultural engineering. Students will also learn about the latest technologies and innovations in the field of agriculture. The program is typically offered in schools, colleges and is taught in experienced faculties that have deep understanding of the subject matter. Upon completion of the program, students are well prepared to enter the workforce as teachers of agriculture. Agricultural Education if effective

could help to emancipate an individual from the vicious circle of poverty to requisite knowledge, skills, and improved level of income (Murtala Sule, 2019).

The national council of education (2020) gave a series of recommendations inventing these skills in Agricultural Education Programmes in the future.

- ❖ Ensure students are highly motivated
- ❖ Well- educated lecturers providing agricultural food, fibre and national resources system education.
- ❖ Provide undergraduates with seamless lifelong instruction in Agriculture, food, fibre and natural resources.
- ❖ Ensure students who enrol in Agricultural Science courses are conversationally literate in agriculture.
- ❖ Ensure continuous education in Agriculture Agripreneurship and self-employment.

According to Okonji (2022), there are various ways through which university Agricultural science undergraduates could be trained to acquire these skills it could be information about workshops short-term courses, participation in seminars and further educational programmes.

Agripreneurship is the combination of Agriculture and entrepreneurship. It refers to the practice of applying business principles and entrepreneurial skills in the agricultural sectors. Agripreneurs typically identify opportunities in the agricultural industry, develop innovative ideas, and launch new ventures or initiatives to address those opportunities. They may engage in activities such as farming, agro-processing, agricultural technology development, agricultural consulting, or marketing and distribution of agricultural products.

Fontanari & Malaer (2021) opined that Agripreneurship is a business activity that encompasses the production, processing, and marketing of agricultural products and services adding value through various stages of the supply chain. The term Agripreneurial and Entrepreneurial are related and therefore, frequently used in the context of education and small business formation in Agriculture. An Agripreneur therefore is an individual who ventures into business in the Agricultural Sector. A skill according to Orezi (2019) is defined as a special ability in any field specially acquired by learning and practice. Turnbull (2018), stated that skill is the ability to do something well. It is that knowledge that is translated into practical use. In this context, skill is the knowledge, competencies, and abilities to perform operational tasks. Ohwovoriole (2022) sees skills as the ability to use knowledge effectively and readily in performance. It is the ability to transform knowledge into action. Skills in any context helps to harness natural resources and promote economic stability. Practical and organizational skills in Agriculture provides fertile ground for the promotion of Agripreneurial activities, Asouzu (2015) outlined three categories of skills including human skills, the ability for workers to organize information and be able to work in a group, and conceptual skills which involves the capacity of management to perceive the organization as an integral unit. Vocational skill refers to the specialized task that enables workers to use their knowledge of the tools, techniques, and procedures that are typical to their specific area. In the case of this study, Agripreneurial skills refer to the knowledge, competencies, and abilities necessary to successfully operate a business in the agricultural sector. These skills involve a combination of entrepreneurial skills, such as innovative thinking, risk, and business management as well as specialized knowledge in Agriculture including crop production, livestock management, agribusiness marketing, and value chain analysis. Agripreneurship seeks to prepare people especially youths to be responsible enterprising individuals that will contribute to the economic development of the society. It exposes young graduates to opportunities and offers them the knowledge, skills, and attitudes such as recognition of business opportunities, generation of ideas, and ability to streamline available resources while acknowledging the potential risk to embark on opportunity-creating ventures, creativity, and critical thinking potentials in them to become a successful entrepreneur.

An Agriprenueur is an entrepreneur who is involved in the Agriculture industry. He may operate farms, ranches, or any other agricultural business and they often employ innovative strategies and technologies to improve productivity sustainability. Agriprenueurs may also be involved in food processing, distribution, or other value-added activities within the supply chain. Their goal is to create profitable

and sustainable businesses while contributing to the growth and development of the agricultural sector. According to Okoro (2021), an Agriprenueur is a person who organizes and manages a business undertaking assuming the risk for the sake of profit. An undergraduate is said to possess Agriprenueurial skills as long as the knowledge and attitude that constitutes the competence is part of him and enables him to perform effectively within certain work practices as an Agriprenueur. In other words, Agriprenueurial skills are skills and attitudes acquired by a student that instils such traits as innovativeness, ingenuity, resourcefulness, and endurance. Agriprenueurial skills are meant to enable students to overcome the problem of unemployment. These skills are needed in the agricultural sector and the various aspects of production for maximum profit. These skills when applied in pineapple production will promote self-reliance and productivity.

Generally, pineapple is a tropical fruit that is known for its sweet and tangy flavour. It is typically yellow and orange with a rough and spiky exterior. Pineapple has a juicy flesh that is often eaten raw or used in various dishes. Besides its delicious taste, pineapple also offers several health benefits. It is a good source of vitamin C, manganese, and dietary fibre. It contains enzymes called bromelain, which has anti-inflammatory properties and aids indigestion. Pineapple can be enjoyed in a variety of ways. It is commonly used in fruit salad, smoothies, and desserts. It is also a popular ingredient in savoury dishes such as stir-fries and grilled foods. Additionally, pineapple can be canned or juiced for longer shelf life and convenience. Agripreneurs can create value-added products from pineapple jam, pineapple juice, and other pineapple-based snacks. However, Delta State in Nigeria is known for its Agriculture pineapple activities including pineapple cultivation, with many farmers engaged in this crop.

Statement of the Problem

The changing economies across the globe, resulting in competitive advantage which has now replaced comparative advantage is forcing nations to pay attention to Agripreneurship. This is further encouraged by the persistent increase in graduate unemployment especially those without skills. One of the threatening challenges faced by individual families and the entire nation is the face of technological influx in the massive unemployment of university graduates. This problem of graduate unemployment has resulted in their idleness and involvement in various social vices which remain an issue in Nigeria today. It seems that university undergraduates are not well equipped with the necessary Agripreneurial skills needed to empower themselves either to be gainfully employed in the Agro-industries or become self-employed. At the tertiary level students are taught the husbandry of various crops such as cashew, paw-paw, pineapple, cocoa, and oil palm. Students of Agricultural Education at the tertiary level must possess Agripreneurial skills to manage any job in the agricultural sector. Recent observations have shown that most undergraduates of Agricultural Education are ill-equipped with sufficient skills needed for a lucrative agribusiness such as pineapple production. The majority of the Departments of Agricultural Education do not have good land space where undergraduate students of Agriculture are apportioned plots to practice group management of choice. This is however not in line with the habit theory strategies. "A theory that states that a student's learning environment should be a replica of where he will subsequently work. It has also been observed that students of Agricultural Education even on graduation cannot boast of his or her farm anywhere due to poor practical ability, while others rather pay extra to learn other skills such as tailoring, carpentry, decorations, makeover, photography, and furniture which ought not to be if they were well equipped in the practice of Agriculture. This ineffectiveness in the teaching process has made most young school leavers deviate from the line of Agriculture.

The lack of entrepreneurial skills exhibited by agric-education undergraduates in Delta State remains an obstacle and hinders their ability to capitalize on the economic potential provided by pineapple production resulting in underutilization of agricultural resources and unemployment. Therefore, undergraduates of agricultural education are faced with serious challenges of entery into pineapple production due to inadequate training in Agripreneurship skills and as such limit their self-employment potential to Delta State Agricultural Sector

The high rate of poverty, starvation, inflation, corruption, thuggery, kidnapping, and so many other social vices are worrisome to the government and every well-meaning Nigerian. The situation in Delta

State is so pathetic that most young graduates take to the street at any slight provocation. The apparent shift from Agriculture to Internet Fraud popularly known as "Yahoo" and Yahoo Plus" is worrisome because unemployed youths embark on many dangerous vices just to make ends meet. The way out is for our educational institutions to explore appropriate strategies that will enable them to cope with the increasing unemployment rate.

Another pertinent problem is the work force training (Goshit 2016). Teaching as a profession in Nigeria is considered to be for poor people; therefore the few professionals that are available prefer to work in companies and industries where they can earn better salaries. With this deplorable condition, lecturers especially those in agricultural education programmes are not motivated to go extra mile in acquiring or assisting undergraduate students to acquire agripreneurial skills.

The problem of few agricultural outlets to accommodate students doing industrial attachment is alarming. This is even worse within each tertiary institution vicinity. Students are exposed to dangers such as road accident, excessive transport fare, and even robbery attacks in a bit to be experience actual work scenarios. There are cases where agricultural science students are found doing industrial attachment in mostly primary schools, construction companies, local government offices, and even urban development boards

Nigeria Educational Research and Development Council (2016) has stated that "Guided Discovery" should be used to teach agriculture in tertiary institutions. Majority of our higher institutions do not have functional pineapple gardens where students who take to pineapple production can practice their skills following classroom instructions

Pineapple and most other crops in the areas of crop production have not been effectively harnessed as supposed. This is because most pineapple farmers are our aged parents. This has resulted in the wide gap between the quantity demanded by consumers and the quantity supplied. Most pineapples consumed in the state are brought from other states in order to meet up with demand.

The ability to perform practice depends on the possession of skills required to effectively and efficiently carry out task related to the practice. Agripreneurial skills require a high level of proficiency with which a pineapple farmer could manage a pineapple farm. Due to the low level of dissemination and public awareness most students are not even informed. It is wrong for undergraduates of agricultural education not to be exposed to agripreneurial skills in pineapple production, since concentration on these competencies will bring about economic recovery in Delta State. Most undergraduates are living with meagre allowance from their poor parents with current devalued naira and escalating inflation rate thereby reducing the desire to start up agricultural businesses

Most students lacked financial help coupled with the fact that the current standard of living is high. Most students battle with depression which may result into quitting from school. It is quite disheartening that undergraduates of agricultural education and other practical courses in the university are not empowered. Due to insufficient support in form of empowerment, scholarships, grants, and even students loans, most agricultural undergraduates remain dependent. Most students depend on the meagre sources of income of their parents or guardians for survival. To reverse this, agripreneurial skills in pineapple production will help improve the income generating potentials of agricultural education undergraduates.

The ministry of agriculture and extension agents are not functional in providing information on the agripreneurial skills needed by undergraduates agricultural education students. There is no campaign and sensitization of students and the entire populace on the benefits of agripreneurial skills and the need for adoption. The department of agricultural education in various higher institutions in Delta State are not adequately funded for intensive research in agripreneurial skills and impact on crop production.

Most departments of university lack adequate supervision, monetary and evaluation mechanisms of lecturers to enhance proper implementation of the agricultural education programmes. Observation of

lecturers revealed that many agricultural education lecturers are not effective due to laziness or inexperience in the discipline. Only few ones are crop production experts. This has negatively affected the level of agripreneurial skills transferred to students.

It is against this background that this study investigates the agripreneurial skills needed by university undergraduates in Delta State for entry into pineapple production for self-employement.

Research Questions

i. What specific agripreneurial skills do Agricultural Education undergraduates need for pre-planting operations in pineapple production for self-employment in Delta State?
ii. What specific agripreneurial skills do Agricultural Education undergraduates need for planting operations in pineapple production for self-employment in Delta State?
iii. What specific agripreneurial skills do Agricultural Education undergraduates need for post-planting operations in pineapple production for self-employment in Delta State?
iv. What specific agripreneurial skills do Agricultural Education undergraduates need for harvesting operations in pineapple production for self-employment in Delta State?
v. What specific agripreneurial skills do Agricultural Education undergraduates need for post-harvest operations in pineapple production for self-employment in Delta State?
vi. What specific agripreneurial skills do Agricultural Education undergraduates need for marketing pineapples as part of self-employment in Delta State?
vii. What is the nature of self-employment opportunities available to Agricultural Education undergraduates within the pineapple production industry in Delta State?

Hypotheses

The following null hypotheses will be tested at a 0.05 level of significance for the study.

H_{o1}: There is no significant mean difference in the agripreneurial skills needed for pre-planting operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State.
H_{o2}: There is no significant mean difference in the agripreneurial skills needed for planting operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State.
H_{o3}: There is no significant mean difference in the agripreneurial skills needed for post-planting operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State.
H_{o4}: There is no significant mean difference in the agripreneurial skills needed for harvesting operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State.
H_{o5}: There is no significant mean difference in the agripreneurial skills needed for post-harvest operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State.
H_{o6}: There is no significant mean difference in the agripreneurial skills needed for marketing pineapple and the self-employment readiness of Agricultural Education undergraduates in Delta State.
H_{o7}: There is not significant mean difference in the nature of self-employment opportunities available to Agricultural Education undergraduates in pineapple production and their readiness for self-employment in Delta State.

Purpose of the Study

The purpose of this study is to investigate the Agripreneurial skills needed by agricultural education undergraduates for entry into pineapple production for self-employment in Delta State. This study aims at:

i) Identifying the specific agripreneurial skills needed by Agricultural Education undergraduates for successful pre-planting operations in pineapple production for self-employment in Delta State.
ii) Determining the agripreneurial skills needed by Agricultural Education undergraduates for post-planting operations in pineapple production, for self-employment in Delta State.

iii) Identifying the agripreneurial skills needed by Agricultural Education undergraduates for harvesting operations in pineapple production for self-employment in Delta State
iv) Determining the agripreneurial skills needed by Agricultural Education undergraduates for post-harvesting operations in pineapple production for self-employment for Agricultural Education undergraduates in Delta State.
v) Identifying the agripreneurial skills needed by Agricultural Education undergraduates for marketing of pineapples with an emphasis on self-employment opportunities in Delta State.
vi) Assessing the nature of opportunities available to Agricultural Education undergraduates in Delta State, with a focus on the agricultural sector.

Theoretical Framework.

Two theories were used in this study. They are
(1). The Human Capital Theory
(2). Experiential Learning Theory

Human Capital Theory

The origin of Human Capital Theory is rooted in the works of economist Adam Smith and H. von Thünen in the early 1960s, who concluded that "all of the acquired and useful abilities of all of the inhabitants of a country should be considered as a part of capital (of a nation)" (Shulz, 1971). John Stuart mill and Alfred Marshall further addressed application of human capital in economic issues (Sweetland, 1996). Schultz (1961) proposed that Human Capital consisted of the knowledge, skills and abilities of the people employed in an organization. The concise Shultz's initial definition of Human Capital is somewhat limited in that it does not take into consideration the concept of 'value' and the importance of 'investment' in Human Capital. In 1981, Schultz revamped the definition and defined Human Capital as: all human abilities to be either innate or acquired. Attributes which are valuable and can be augmented by appropriate investment will be Human Capital (Schultz, 1981). More than a decade later, Becker (1993) defined Human Capital as the 'knowledge, information, ideas, skills and health of individuals'.

According to Scott (2014), Human Capital Theory is a modern extension of Adam Smith's explanation of wage differentials by the so-called net advantage/disadvantages between different employments. Smith (1952) assessed the relationship between a nation's wealth and the productivity of its people which lent to two fundamental principals of the Human Capital Theory. The first operationalized labour inputs are more than merely a quantitative assessment and are the inhabitants or members of society. While the second stated that persons enhancing their abilities through "education, study, or apprenticeship, always cost a real expense, which is capital fixed and realized (Smith, 1952). However, Smith stated that placing a market value on benefits received through enhancing one's abilities had not been fully determined. Becker in Nsikak and Bernard (2013) affirms that Human Capital connotes the productive capabilities that present value in investments in the skill of people.

Bontiset, Dragonetti, Jacobsen and Roos (1999) define Human Capital as the human factor in the organization; the combined intelligence, skills and expertise that gives the organization its distinctive character. The human elements of the organization are those that are capable of learning, changing, innovating and providing the creative thrust which if properly motivated can ensure the long-term survival of the organization. Furthermore, Becker (1993) opined that Human Capital is the main and crucial factor of wealth creation in developed countries. It is defined as the people, their performance and their 'potential' in the organization (Thomas, Smith and Diez, 2013). The inclusion of the term 'potential' indicates that employees can develop their skills and abilities over time. Schultz (1993) defines Human Capital as a key element in improving a firm assets and employees in order to increase productive as well as sustain competitive advantages.

Human Capital was also defined by Dess and Picken (1999), as the individual's capabilities, knowledge, skills and experience of the company's employees and managers, as they are relevant to the task at hand, as well as the capacity to add to this reservoir of knowledge, skill, and experience through individual learning. Human Capital attributes, such as education and experience, may also be critical

for entrepreneurial success. Human Capital of founders attracts investors (Stuart and Sbetti, 1990), especially venture capitalists (Zacharakis and Meyer, 2000). According to Lall (1998), Human Capital concept can be divided into two (2) different components; skill development, referring mainly to industry-related education and training (both formal and informal) and technological capability formulation, which account for the development of individual and institutional skills and knowledge derived from technological effort.

Swanson and Holton III (2001) designed a model that explicitly explained the Human Capital Theory. The model is shown in figure I.

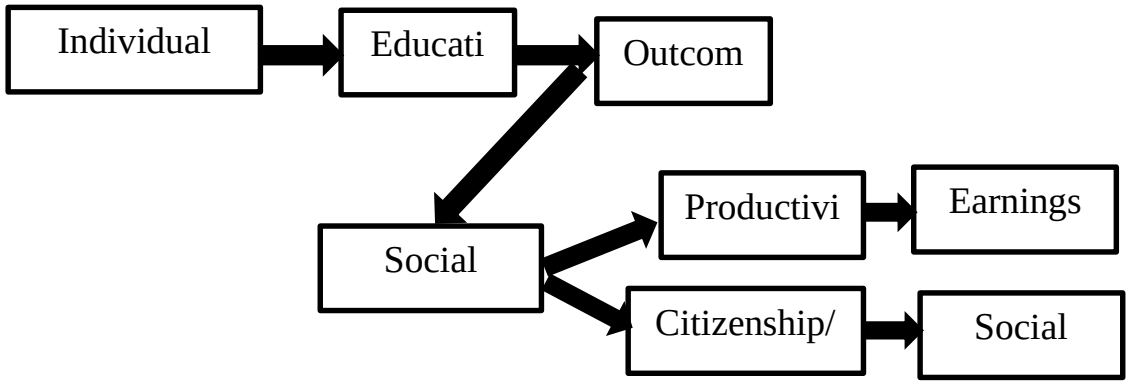

Figure I : A Model of Human Capital Theory (Swanson and Holton 2001)
Figure I illustrates that investment in undergraduate students and through proper education tends to produce desirable outcomes that can lead to society development, as well as development of agripreneurial skills which leads to self-employment. By this model, investment in agripreneural skills geared towards improving Agricultural Education Students with regards to pineapple production will help them effectively learn to an extent that they can apply what they have learnt to earn a living and thus, be self-employed.

The study is hinged on Human Capital Theory. Human Capital Theory is appropriate for the study because the study deals with agripreneurial skills needed by undergraduates agricultural education students in pineapple production to a point that the skills acquired becomes a finished product that students can put into practice and become self-employed after graduation.

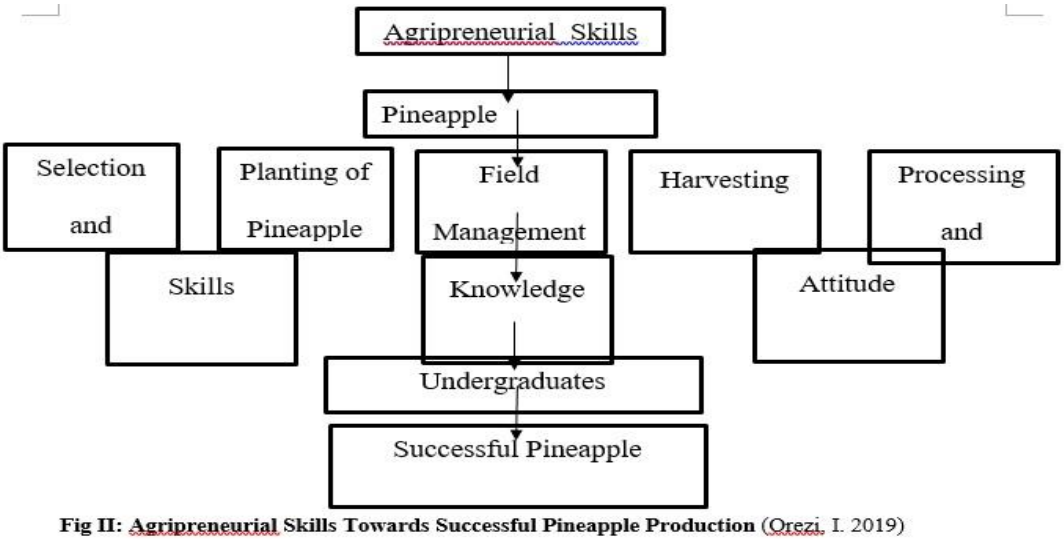

Fig II: Agripreneurial Skills Towards Successful Pineapple Production (Orezi, I. 2019)

Experiential Learning Theory

David Kolb put forth the theory of experiential learning in 1984, which derived from the works of Dewey, Lewin and Piaget. According to Kolb. Learning is the process of creating knowledge through the transformation of experience. Dewey who was a philosopher of experiential learning, believed that it was the responsibility of education to organize practices that facilitate more favourable experiences. The first experiential learning theory emerged in the mid-nineteenth century as a means to move away from conventional formal education where teachers solely imparted abstract concepts to students and instead, adopted a more immersive method of instruction. Students will acquire knowledge through practical experience by applying what they have learned to develop new skills or ways of thinking.

The transformation of experience leads to the creation of knowledge which is known as experiential learning. It is a form of learning whereby students have a chance to acquire and apply knowledge, skills and feelings in an immediate and relevant setting. Experiential learning according to several authors listed below.

1. **David.A.Kolb:** Experiential learning is one of the most widely recognised. He says it is a process whereby knowledge is created through the transformation of experience.
2. **John Dewey:** He says learning is a continuous process and occurs through the interaction between an individual and their environment
3. **Carly Pogers:** Roger emphasizes the importance of personal environment and engagement in experiential learning. He defines experiential learning as the process of creating knowledge through the transformation of our attitudes, beliefs and values as a result of direct individual engagement with the subject matter.
4. **Jean Piaget:** he sees it as an active process in which individuals construct knowledge through their interaction with the world.
5. **Paulo Friere**: Paulo considers experiential learning as a transformative process that involves critical reflection on the individual experiences and the social context in which they occur.

Houle in Smith (2016), explained that experiential learning focuses on the learning process of the individual which the learner goes through interaction with the environment; experiential learning allows students to directly encounter the phenomena he or she is learning. Houle, experiential learning could be:

1. Learner control and student-directed
2. The courses are designed with greater emphasis on problem-solve, inquiry and discovery.

The courses prioritize the practical application of the course content.

The courses aim to equip students with skills and knowledge that can be applied in real-life situations. The underling understand of this theory plays a crucial role in the teaching and learning process. It portrays two dialectically related modes of grasping experience. Concrete experience and abstract conceptualization and two dialectically related modes of transforming experience. Reflective observation and active experimentation. Powell's & Wells (2020) summarized Kolbs Stage Cycle.

- **Stage I:** The learner is placed in a position to approach the situation and connect it with their previous life understanding through emotions rather than discussions as concrete experience is involved.
- **Stage II:** The learner can approach a situation and relate it to their previous life understanding through concrete experience.
- **Stage III:** Abstract conceptualization allows the learner to develop a generalization or theory to use in problem solving.
- **Stage IV:** Active experimentation, which allows the learner to diagnose the situation or problem and use behavioural skills to take action.

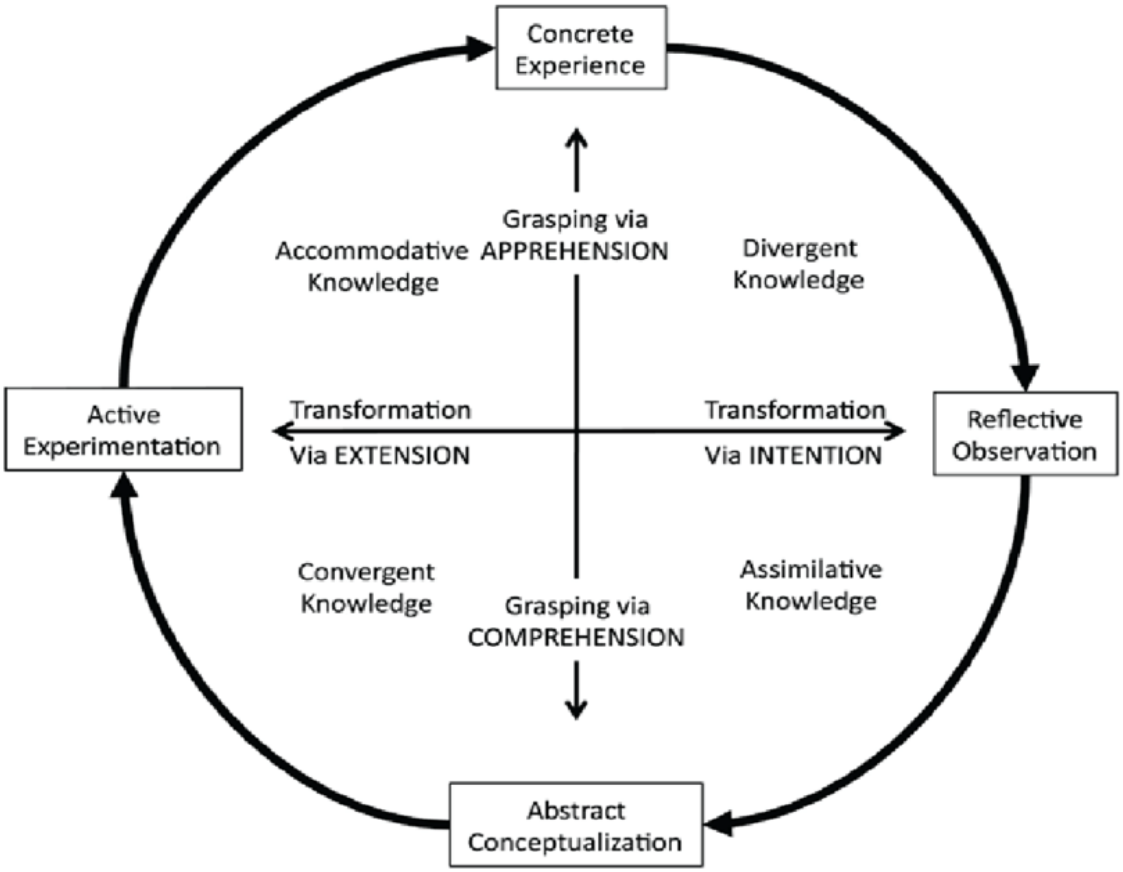

Fig II: Model of Experiential Learning by David Kolbs

Model of Experiential Learning

Production and experiential learning are chosen because they both include active participation, innovation, and critical thinking of the leaner towards achieving the desired objective. The factors of production, land, labour, capital, and management are essential human resource inputs necessary for the efficiency of the production process including pineapple. Adegeye and Dilto (2016), pointed out that management decisions such as what to produce?, How to produce them?, Quality of inputs in the production process is usually the responsibility of the Agriculture entrepreneur (Agripreneur). The experiential learning theory has a model that offers Agricultural Education students (Undergraduates) Agripreneurial skills directly from meaningful experience, facilitated by teachers during the teaching and learning process. Experiences acquired through learning by doing are meaningful that undergraduate's students will be able to go into self-employment and fulfilment.

Research Methodology

Research Design

The design used for study was descriptive survey research method. Okorodudu (2013) defined descriptive survey as a research design that samples participants or variable without being able to manipulate them. A descriptive survey was adopted because the survey involved the use of a structured questionnaire to elicit responses from respondents on Agric-perineurial skills needed by university undergraduates in pineapple production in Delta State for self – employment.

Population of the Study

The population of the study comprised all Agricultural Education Undergraduates of the universities in Delta State, Delta State University, Abraka, University of Delta Agbor, and University of Science and Technology, Ozoro, that have had pineapple as a course of study in crop production.

Population of the Study

Universities	Level	Population
Delta State University, Abraka	300L 400L	71
Delta State University of Science and Technology, Ozoro	300L	21
University of Delta, Agbor	300L 400L	23
Total		**115**

Source: Departmental Survey

Research Instrument

The instrument used to collect data in this study was a structured questionnaire. The questionnaire was titled the Agripreneurial Skills Needed by Undergraduates of Agricultural Science for Pineapple Production Questionnaire (ASNUAEPPQ). The questionnaire contained two parts. One consists of information on the Agripreneurial skills needed by undergraduates of agricultural education for pineapple production.

Part two comprises of items structured into four areas of Skills, numbered A-D each addressing Agripreineurial Skills Needed in pineapple production. These areas include planting, pre-planting, planting, post – planting, harvesting, and marketing activities in pineapple production. The questionnaire was coded with four (4) points normal scale designed for each possible response that was expected from respondents.

Validation of the Instrument

The instrument was subjected to face and content validation through the expert judgement of the project supervisor, two lecturers from the Department of Vocational Education (Agricultural Science Unit) and one lecturer from faculty of Agriculture Delta State University, Abraka. The corrections of the experts were affected to produce the questionnaires.

Reliability of the Study

The reliability of the instrument was determined through a pilot study. The test-retest method was employed in testing the reliability of thirty (30) respondents from the River State University of science and technology, a tertiary institution outside the actual study area. They responded to the items of the instrument twice at interval of 3 weeks. The results were correlated using the Pearson Product-Moment Correlation Coefficient (r). The reliability obtained was 0.78 which indicated that the instrument was reliable.

Method of Data Collection

The questionnaire developed for data collection was administered to the respondents twenty-one with the help of two (2) research assistants. One hundred and fifteen (115) copies of questionnaire were administered to seventy one (71) students of Delta State University Abraka, (21) students of University of Science and Technology Ozoro and twenty four (23) to University of Delta Agbor. These questionnaires were retrieved from respondents after filling them.

Method of Data Analysis

The data collected were analysed using means and standard deviation to measure the research questions. The mean criterion for the analysis was 2.50 and used as benchmark for accepting or rejecting any item. This was used because of the 4 point scale rating of the questionnaire.

The t- test statistical tool was used to test the hypothesis at 0.05 level of significance. The hypotheses were accepted when the table value is equal or greater than the calculated values of t, and rejected when the table value of t is less than the calculated value of t.

Sampling and Sampling Techniques:
Due to the small number of respondents, the total population was used as sample. Hence sample equal 115 respondents.

Data Presentation, Analysis and Discussion
This section focused on data presentation, analyses and discussion of findings. After a thorough explanation of the goal, confidentiality, and voluntary nature of the research, 115 after copies of the structured questionnaire were given to all respondents at their place of job assignments. The participants were also made to understand that their responses were solely intended for academic purposes in Delta State University, Abraka. However, out of the 115 questionnaire administered, only 111 retrieved were found usable, where the data extracted for the purpose of analyses. Thus, the response rate of 111 accounted for 97% which is adjudged adequate, whereas the ones not returned were 4 accounting for 3%.

4.1 Presentation of Data

4.2 Socio-demographic Characteristics of Respondents

Table 4.1: Demography of Respondents

Category	Subcategory	Number of Respondents	Percentage
Age in years	19-21	20	18.00%
	22-24	25	22.50%
	25-27	20	18.00%
	28-30	15	13.50%
	31-33	15	13.50%
	Over 34 years old	16	14.40%
Gender	Male	55	49.50%
	Female	56	50.50%
Education level	300 level	30	27.00%
	400 level	35	31.50%
	500 level	25	22.50%
	Others specify	21	19.00%
Field of study	Agricultural Science Education	25	22.50%
	Agric. Economics/Agribusiness Management	20	18.00%
	Crop Science	25	22.50%
	Soil Science	20	18.00%
	Others specify	21	19.00%
School	Delta State University, Abraka	60	54.10%
	University of Delta, Agbor	51	45.90%
	University of Sci. and Tech. Ozoro	50	45.00%
Student Industrial Work Experience Scheme (SIWES)	Yes	70	63.10%
	No	41	36.90%

Fieldwork, 2024

Table 4.1 shows the demographic analysis of respondents indicates a diverse age range, with the largest group, 22.50%, aged between 22-24 years. This is closely followed by age groups 19-21 and 25-27, each comprising 18.00% of the sample. Additionally, 13.50% of respondents fall within the age ranges of 28-30 and 31-33 years, while those over 34 years constitute 14.40%. Gender distribution is nearly even, with females representing a slight majority at 50.50%, while males account for 49.50% of the sample, suggesting balanced perspectives between male and female respondents.

Regarding education level, respondents span various stages of their studies. Those in the 400 level form the largest group at 31.50%, indicating a significant portion nearing the completion of their undergraduate programs. Respondents in the 300 level make up 27.00%, while those in the 500 level, typically the final year, account for 22.50%. Additionally, 19.00% of respondents fall under the "Others" category, likely representing postgraduate or non-traditional students.

In terms of field of study, the respondents show diverse academic interests related to agriculture. Agricultural Science Education and Crop Science each represent 22.50% of the sample, indicating these are the most common areas among respondents. Agricultural Economics/Agribusiness Management and Soil Science are equally represented at 18.00%, with an additional 19.00% categorized under "Others," reflecting a range of specialized or less common agricultural fields.

When considering the academic institution, Delta State University, Abraka hosts the majority of respondents, accounting for 54.10%, while 45.90% attend the University of Delta, Agbor. This distribution reflects a significant representation from both institutions, which are key to agricultural education in Delta State. Lastly, Student Industrial Work Experience Scheme (SIWES) participation is substantial, with 63.10% having engaged in the program. In contrast, 36.90% have not participated, suggesting varied practical exposure levels among respondents, which could influence their readiness for agripreneurial ventures.

Testing of Hypotheses

H_{01}: There is no significant mean difference in the agripreneurial skills needed for pre-planting operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State.

Table 4.10 Summary of t-test analysis for Hypothesis 1

Parameters	Mean Aggr.	Std	df	T	P-value	95% Confidence Interval of the Difference	
						Lower	Upper
Agripreneurial Skills for Pre-Planting Operations	2.90	0.97	110	33.27	0.001	2.7208	3.0655
Readiness for Self-Employment	2.89	0.94				2.7162	3.0675

SPSS v.25 result, 2024 *P< 0.05 level of Significance*

Table 4.10 shows the hypothesis testing results for H_{01}, which states that there is no significant mean difference between the agripreneurial skills needed for pre-planting operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State, reveal a significant relationship. The mean aggregate for agripreneurial skills for pre-planting operations is 2.90 ± 0.97, while the mean for readiness for self-employment is 2.89 ± 0.94.

The t-test statistic value of 33.27, with a p-value of 0.001, indicates a statistically significant difference between the two variables at a 95% confidence level. The 95% confidence interval of the difference for agripreneurial skills in pre-planting operations (2.7208 to 3.0655) and readiness for self-employment (2.7162 to 3.0675) further confirms this significant difference, as the intervals overlap closely but remain distinct.

Since the p-value is less than the significance level (usually 0.05), we reject the null hypothesis, suggesting that the agripreneurial skills for pre-planting operations do significantly relate to the readiness of Agricultural Education undergraduates for self-employment in pineapple production. This finding implies that the development of specific pre-planting skills could influence undergraduates' preparedness for entrepreneurial endeavors within the agricultural sector in Delta State.

H_{02}: There is no significant mean difference in the agripreneurial skills needed for planting operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State.

Table 4.11 Summary of t-test analysis for Hypothesis 2

Parameters	Mean Aggr.	Std	df	T	P-value	95% Confidence Interval of the Difference	
						Lower	Upper
Agripreneurial Skills for Planting Operations	2.87	0.94	110	32.63	0.001	2.6975	3.0476
Readiness for Self-Employment	2.89	0.94				2.7162	3.0675

SPSS v.25 result, 2024 *P< 0.05 level of Significance*

Table 4.11 shows the analysis for Hypothesis 2, which posits that there is no significant mean difference between the agripreneurial skills needed for planting operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State, reveals a significant relationship. The mean aggregate for agripreneurial skills in planting operations is 2.87 ± 0.94, while the mean for self-employment readiness is 2.89 ± 0.94.

The t-test statistic value of 32.63, with a p-value of 0.001, indicates a statistically significant difference between the two variables at a 95% confidence level. The confidence intervals for agripreneurial skills for planting operations (2.6975 to 3.0476) and readiness for self-employment (2.7162 to 3.0675) exhibit a slight overlap, but the p-value confirms that this difference is statistically significant.

Given that the p-value is well below the 0.05 significance level, we reject the null hypothesis, suggesting that the agripreneurial skills required for planting operations significantly impact the readiness of Agricultural Education undergraduates for self-employment in pineapple production. This result implies that specific planting skills are critical for equipping undergraduates with the competence and confidence needed for self-employment in the agricultural sector within Delta State.

H_{03}: There is no significant mean difference in the agripreneurial skills needed for post-planting operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State.

Table 4.12 Summary of t-test analysis for Hypothesis 3

Parameters	Mean Aggr.	Std	df	T	P-value	95% Confidence Interval of the Difference	
						Lower	Upper
Agripreneurial Skills for Post-Planting Operations	2.88	0.94	110	32.51	0.001	2.6999	3.0504
Readiness for Self-Employment	2.89	0.94				2.7162	3.0675

SPSS v.25 result, 2024 *P< 0.05 level of Significance*

The analysis for Hypothesis 3 examines whether there is a significant mean difference between the agripreneurial skills needed for post-planting operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State. The mean aggregate for agripreneurial skills in post-planting operations is 2.88 ± 0.94, while the mean for self-employment readiness is 2.89 ± 0.94.

The t-test yields a value of 32.51 with a p-value of 0.001, indicating that the difference between the two variables is statistically significant. With a 95% confidence interval for agripreneurial skills for post-planting operations ranging from 2.6999 to 3.0504 and for self-employment readiness ranging from 2.7162 to 3.0675, the slight overlap does not undermine the significance, as evidenced by the p-value.

Since the p-value is below the 0.05 threshold, we reject the null hypothesis. This result suggests that post-planting agripreneurial skills significantly impact the readiness of undergraduates for self-employment in the pineapple production industry in Delta State. It highlights that possessing these skills enhances the capability of undergraduates to manage the post-planting phases of pineapple production, thereby improving their readiness for entrepreneurial ventures within the agricultural sector.

H_{o4}: There is no significant mean difference in the agripreneurial skills needed for harvesting operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State.

Table 4.13 Summary of t-test analysis for Hypothesis 4

Parameters	Mean Aggr.	Std	df	T	P-value	95% Confidence Interval of the Difference	
						Lower	Upper
Agripreneurial Skills for Harvesting Operations	2.88	0.94	110	32.64	0.001	2.7054	3.0552
Readiness for Self-Employment	2.89	0.94				2.7162	3.0675

SPSS v.25 result, 2024 *P< 0.05 level of Significance*

The analysis for Hypothesis 4 investigates whether there is a significant mean difference between the agripreneurial skills needed for harvesting operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State. The mean aggregate for agripreneurial skills in harvesting operations is 2.88 ± 0.94, while the mean for self-employment readiness is 2.89 ± 0.94.

The t-test results show a t-value of 32.64 and a p-value of 0.001, indicating a statistically significant difference between the two variables. The 95% confidence interval for agripreneurial skills in harvesting operations ranges from 2.7054 to 3.0552, while the interval for self-employment readiness is from 2.7162 to 3.0675. Although there is slight overlap between the confidence intervals, the low p-value suggests that the difference is statistically significant.

Since the p-value is less than 0.05, the null hypothesis is rejected. This result implies that the agripreneurial skills required for harvesting operations are significantly related to the self-employment readiness of undergraduates in Delta State. Therefore, mastering these harvesting skills appears to enhance students' preparedness for entrepreneurial ventures in pineapple production, underscoring the importance of practical skills in this phase for self-employment readiness.

H_{o5}: There is no significant mean difference in the agripreneurial skills needed for post-harvest operations and the self-employment readiness of Agricultural Education undergraduates in pineapple production in Delta State.

Table 4.14 Summary of t-test analysis for Hypothesis 5

Parameters	Mean Aggr.	Std	df	T	P-value	95% Confidence Interval of the Difference	
						Lower	Upper
Agripreneurial Skills for Post-Harvest Operations	2.87	0.94	110	32.44	0.001	2.6959	3.0467
Readiness for Self-Employment	2.89	0.94				2.7162	3.0675

SPSS v.25 result, 2024 *P< 0.05 level of Significance*

Table 4.14 shows Hypothesis 5 which examines whether there is a significant mean difference between the agripreneurial skills needed for post-harvest operations and the self-employment readiness of

Agricultural Education undergraduates in pineapple production in Delta State. The mean aggregate for agripreneurial skills in post-harvest operations is 2.87 ± 0.94, while the mean for self-employment readiness is 2.89 ± 0.94.

The t-test analysis yielded a t-value of 32.44 and a p-value of 0.001, indicating a statistically significant difference between these two variables. The 95% confidence interval for agripreneurial skills in post-harvest operations extends from 2.6959 to 3.0467, while for self-employment readiness, it ranges from 2.7162 to 3.0675. Although there is a small overlap between the confidence intervals, the low p-value suggests a meaningful difference.

With the p-value being less than the significance level of 0.05, the null hypothesis is rejected. This finding indicates that there is a significant association between the post-harvest agripreneurial skills and the readiness of undergraduates for self-employment in Delta State. Therefore, acquiring post-harvest skills is important for undergraduates to successfully prepare for self-employment within the pineapple production industry, emphasizing the role of these skills in promoting entrepreneurial readiness.

H_{06}: There is no significant mean difference in the agripreneurial skills needed for marketing pineapple and the self-employment readiness of Agricultural Education undergraduates in Delta State.

Table 4.15 Summary of t-test analysis for Hypothesis 6

Parameters	Mean Aggr.	Std	df	T	P-value	95% Confidence Interval of the Difference	
						Lower	Upper
Agripreneurial Skills for Marketing Pineapples	2.87	0.96	110	32.81	0.001	2.7100	3.0584
Readiness for Self-Employment	2.89	0.94				2.7162	3.0675

SPSS v.25 result, 2024 *P< 0.05 level of Significance*

Table 4.15 shows Hypothesis 6 which investigates whether there is a significant mean difference between the agripreneurial skills needed for marketing pineapples and the self-employment readiness of Agricultural Education undergraduates in Delta State. The mean aggregate for agripreneurial skills in marketing pineapples is 2.87 ± 0.96, whereas the mean for self-employment readiness is 2.89 ± 0.94.

The t-test analysis produced a t-value of 32.81 and a p-value of 0.001, indicating a statistically significant difference between the two means. The 95% confidence interval for agripreneurial skills in marketing pineapples ranges from 2.7100 to 3.0584, while for self-employment readiness, it is from 2.7162 to 3.0675. Although the confidence intervals overlap, the p-value demonstrates a clear statistical significance.

Since the p-value is less than the conventional significance level of 0.05, the null hypothesis is rejected. This indicates that there is a significant difference between the agripreneurial skills required for marketing pineapples and the readiness for self-employment among the undergraduates. The results suggest that possessing marketing skills is crucial for enhancing the self-employment readiness of Agricultural Education undergraduates, highlighting the importance of these skills in their entrepreneurial journey within the pineapple production sector in Delta State.

H_{07}: There is not significant mean difference in the nature of self-employment opportunities available to Agricultural Education undergraduates in pineapple production and their readiness for self-employment in Delta State.

Table 4.16 Summary of t-test analysis for Hypothesis 7

Parameters	Mean Aggr.	Std	df	T	P-value	95% Confidence Interval of the Difference	
						Lower	Upper
Self-Employment Opportunities in Pineapple Production	2.89	0.93	110	32.83	0.001	2.7125	3.0610
Readiness for Self-Employment	2.89	0.94				2.7162	3.0675

SPSS v.25 result, 2024 *P< 0.05 level of Significance*

Table 4.16 shows Hypothesis 7 statement which examines whether there is a significant mean difference between the nature of self-employment opportunities available to Agricultural Education undergraduates in pineapple production and their readiness for self-employment in Delta State. The mean aggregate for self-employment opportunities in pineapple production is 2.89 ± 0.93, while the mean for readiness for self-employment is also 2.89 ± 0.94.

The t-test analysis yielded a t-value of 32.83 and a p-value of 0.001, indicating a statistically significant difference between the two means. The 95% confidence interval for self-employment opportunities ranges from 2.7125 to 3.0610, and for readiness for self-employment, it spans from 2.7162 to 3.0675. Although the means are identical, the significant p-value implies that there is a meaningful distinction in the perceptions of these constructs.

Since the p-value is less than the conventional significance level of 0.05, the null hypothesis is rejected. This indicates that there is a significant difference in the nature of self-employment opportunities available in pineapple production and the readiness for self-employment among Agricultural Education undergraduates. The findings suggest that while students recognize the available self-employment opportunities, their preparedness for seizing those opportunities may differ. This highlights the importance of aligning educational programs with the realities of self-employment in the pineapple production sector in Delta State, ensuring that graduates are not only aware of opportunities but also adequately prepared to take advantage of them.

4.3 Discussion of findings

The study tested several hypotheses to examine whether specific agripreneurial skills needed for pineapple production—across various operational stages—have a significant relationship with the self-employment readiness of Agricultural Education undergraduates in Delta State. The hypotheses sought to explore skills related to pre-planting, planting, post-planting, harvesting, post-harvest, and marketing operations, as well as the broader self-employment opportunities in the pineapple production industry. The discussions are as follows:

Pre-Planting Skills and Self-Employment Readiness

H_{01}: There is no significant mean difference between the agripreneurial skills needed for pre-planting operations and the self-employment readiness of Agricultural Education undergraduates. The findings revealed a significant relationship between the agripreneurial skills required for pre-planting operations and students' self-employment readiness. This aligns with recent studies emphasizing foundational agricultural practices, such as soil preparation and seed selection, which are critical for successful crop cultivation (Nwankwo & Adebayo, 2021). These skills not only ensure crop success but also establish a strong base for students' entrepreneurial confidence. According to Ofoegbu et al. (2020), effective pre-planting skills lay a solid groundwork for subsequent stages, allowing students to view agriculture as a viable business venture.

Planting Skills and Self-Employment Readiness

H_{02}: There is no significant mean difference between the agripreneurial skills needed for planting operations and the self-employment readiness of Agricultural Education undergraduates. The results indicate a significant relationship between planting skills and self-employment readiness, which

corroborates research of Agwu and Ekwe (2022). These authors argue that technical skills in planting, such as crop spacing, watering, and initial care, are essential for successful crop growth and sustainability. Moreover, these skills minimize risks, thereby fostering an environment where self-employment becomes more attainable. Agwu and Ekwe's findings emphasize that developing technical proficiency in planting not only enhances students' productivity but also builds their confidence to embark on their own entrepreneurial journeys.

Post-Planting Skills and Self-Employment Readiness

H_{03}: There is no significant mean difference between the agripreneurial skills needed for post-planting operations and the self-employment readiness of Agricultural Education undergraduates. The significant relationship between post-planting skills and self-employment readiness highlights the importance of crop maintenance and management. Obasi and Chukwu (2021) stress that post-planting care, such as fertilization, pest control, and disease management, is fundamental for maximizing yields and ensuring crop health. These skills directly contribute to a student's capacity to manage a profitable agricultural business, as they enable them to mitigate challenges that arise during the growth stage. Moreover, such skills provide a competitive advantage in the agricultural sector, further reinforcing students' entrepreneurial readiness.

Harvesting Skills and Self-Employment Readiness

H_{04}: There is no significant mean difference between the agripreneurial skills needed for harvesting operations and the self-employment readiness of Agricultural Education undergraduates. The study also found a significant relationship between harvesting skills and self-employment readiness. Harvesting skills, such as determining the optimal time for harvest and handling techniques to prevent damage, are crucial for product quality. Johnson and Adeyemi (2020) argue that proper harvesting practices are integral to maintaining both fruit quality and crop longevity. These skills enhance students' ability to produce market-ready products, a factor that directly contributes to entrepreneurial success in agricultural ventures. Therefore, by mastering harvesting techniques, students are better equipped to deliver high-quality produce, which in turn boosts their readiness for self-employment.

Post-Harvest Skills and Self-Employment Readiness

H_{05}: There is no significant mean difference between the agripreneurial skills needed for post-harvest operations and the self-employment readiness of Agricultural Education undergraduates. The findings suggest that post-harvest skills are significantly related to self-employment readiness. This supports the findings of Balogun et al. (2021), who stated that post-harvest handling, including cleaning, storage, and transportation, is crucial for reducing spoilage and preserving product quality. By understanding post-harvest handling techniques, students are better able to ensure that their produce reaches the market in optimal condition, thus enhancing its market value and their potential for business success. This skill set is fundamental for those aspiring to pursue self-employment in agriculture, as it contributes directly to the profitability and sustainability of their business.

Marketing Skills and Self-Employment Readiness

H_{06}: There is no significant mean difference between the agripreneurial skills needed for marketing pineapples and the self-employment readiness of Agricultural Education undergraduates. The study identified a significant relationship between marketing skills and self-employment readiness, reflecting the importance of understanding market dynamics. According to Okechukwu and Onah (2022), effective marketing skills, including price setting, product promotion, and customer relationship management, are essential for agricultural entrepreneurs. By mastering these skills, students can successfully identify potential markets, attract customers, and maintain competitive pricing, all of which are vital for building a sustainable business. Such skills are instrumental for students as they navigate the complexities of agricultural markets and enhance their readiness for self-employment.

Self-Employment Opportunities and Readiness

H_{07}: There is no significant mean difference between the nature of self-employment opportunities available to Agricultural Education undergraduates and their readiness for self-employment. Finally, the findings show a significant relationship between knowledge of self-employment opportunities and

readiness for self-employment, which suggests that awareness of potential career paths directly influences entrepreneurial motivation. Eze and Nnadi (2021) noted that understanding the value chain and identifying viable self-employment opportunities are critical for students pursuing careers in agriculture. This awareness empowers students to make informed decisions regarding their career paths and fosters a proactive approach to self-employment.

In nutshell, the significant relationships observed across all hypotheses reinforce the idea that practical agripreneurial skills are essential for fostering self-employment readiness as advocated in Balogun et al. (2021). This finding is consistent with the broader literature, which emphasizes the importance of skill development in empowering agricultural graduates to embark on entrepreneurial ventures and contribute to local economies in Delta State and beyond (Okechukwu & Onah, 2022).

Conclusion

In conclusion, this study has illuminated the agripreneurial skills essential for Agricultural Education undergraduates aspiring to enter the pineapple production industry in Delta State. The findings reveal that while students possess a foundational understanding of the skills required at various stages—ranging from pre-planting to marketing—there remains a notable gap between these skills and the self-employment readiness needed to thrive independently. The statistically significant differences identified across hypotheses underscore the importance of targeted training and skill enhancement to elevate these students' entrepreneurial capacity. By equipping undergraduates with advanced agripreneurial skills, educational institutions can play a crucial role in promoting self-employment within the agricultural sector, thus contributing to economic growth and job creation in Delta State. This research highlights a pathway for curriculum developers, educators, and policymakers to strengthen agricultural education programs, ultimately preparing students for sustainable careers in agriculture that align with local economic needs.

Recommendations

Based on the findings the following recommendations were made:

i. **Enhance agripreneurial training programs** by incorporating practical, hands-on experiences into the Agricultural Education curriculum, allowing students to gain real-world skills in all stages of pineapple production.
ii. **Encourage partnerships between educational institutions and local agricultural businesses** to offer internships and mentorship opportunities for students, thereby boosting their readiness for self-employment.
iii. **Increase access to funding and financial resources** for undergraduates interested in agripreneurial ventures by collaborating with financial institutions and government agencies to provide start-up grants and low-interest loans.
iv. **Integrate comprehensive business management courses** into the Agricultural Education program to help students develop critical skills in finance, marketing, and operations essential for running successful agricultural enterprises.
v. **Promote the development of specialized training workshops** focused on post-harvest processing and marketing techniques, enabling students to add value to their pineapple products and expand their market reach.
vi. **Implement regular professional development sessions for educators** to stay current with best practices and innovations in agriculture, ensuring that they can effectively mentor and prepare students for self-employment in the sector.
vii. **Encourage students to participate in agribusiness competitions and exhibitions** to help them showcase their skills, gain exposure to industry professionals, and network with potential partners and investors.

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