



## مجلة الجمعية العلمية للإرشاد الزراعي

### Exploring Agricultural Entrepreneurial Attitudes among Students of the Faculty of Agriculture, Alexandria University, Egypt

<sup>1</sup>Mohamed Abd Elnaby Bargal

<sup>2</sup>Tamer Gamal Ibrahim Mansour

<sup>1</sup> Department of Agricultural Extension Education, Faculty of Agriculture, Alexandria University, Egypt.

<sup>2</sup>Department of Agriculture, Economic, Agricultural and Biological Research Institution, National Research Centre, Giza, Egypt.

Email: [tamer\\_baz@yahoo.com](mailto:tamer_baz@yahoo.com)

Received: 19/2/2025

Accepted: 4/3/2025

Published: 30/6/2025

pages: 1 - 29

#### Abstract

The study aimed to examine the attitudes of agriculture students toward agricultural entrepreneurship and the factors influencing these attitudes. The study was conducted at the Faculty of Agriculture, Alexandria University, covering a random sample of 265 third- and fourth-year students from the various agricultural specializations. A questionnaire was used as the primary data collection tool during the second semester (April and May) of 2024. The findings indicated that female students comprised 62.3% of the sample, with 80.8% of all students coming from urban areas. Additionally, 45.3% of the students reported having fathers employed in either government or private sector jobs. The results also revealed that 74.3% of students did not participate in the university activities, and approximately 40% worked in temporary jobs. The majority of students' ages were between 21 and 23 years, and they demonstrated high levels of self-efficacy and family support.

Regarding entrepreneurship, 56.2% of students relied on only one or two sources of information, highlighting a need to improve access to diverse resources. The results showed that 51.7% of students have neutral attitudes toward agricultural entrepreneurship, while 26% expressed negative attitudes. The study recommends enhancing educational and training programs related to agricultural entrepreneurship and encouraging interaction with entrepreneurial graduates to expand students' understanding of the challenges and opportunities in this field.

**Keywords:** Entrepreneurship, Entrepreneurial intention, Sustainable economic development.

## **Introduction**

Less-developed countries currently face serious challenges, particularly with high unemployment rates among youth, especially university graduates, due to their limited practical experience, skills, and education. The formal job market in developing countries is becoming saturated and unable to absorb the constantly growing number of university graduates. Consequently, governments have prioritized developing and supporting small and medium-sized enterprises (SMEs) (Amiry et al., 2015). Entrepreneurship, or self-employment, is considered one of the most effective solutions to unemployment among graduates in densely populated countries (FAO, 2014), as it provides job opportunities across various sectors, including agriculture (Behera et al., 2023). In this context, the Ministry of Planning and Economic Development in Egypt has emphasized the state's commitment to entrepreneurship, recognizing it as a primary pathway for investing in youth potential. According to international reports, over 70% of jobs are generated by SMEs. Given recent global challenges and disruptions, the importance of SMEs and micro-enterprises has become increasingly evident; these flexible enterprises can adapt to changing conditions and contribute to spatial equity due to their rapid proliferation across provinces and villages, supporting balanced regional development (Ministry of Planning and Economic Development, 2024).

Aligned with the Egyptian government's focus on entrepreneurship, several initiatives have been launched to promote entrepreneurship and job creation, particularly in the renewable energy and agriculture sectors. These efforts have contributed to a reduction in poverty rates in Egypt from 27.8% in 2015 to 23.6% in 2019 (Nasr-Allah et al., 2020). Entrepreneurship is a fundamental element in ensuring the future sustainability of the agricultural sector, as it enables farmers to innovate and adapt to changing market demands (Far & Rezaei-Moghaddam, 2019). Although the agricultural sector offers significant opportunities for aspiring entrepreneurs—including agribusiness ventures, agricultural startups, agricultural technology innovations, and sustainable farming practices (Behera et al., 2023)—it only accounts for 8.3% of entrepreneurs compared to other sectors, such as wholesale and retail distribution (61.5%) and manufacturing (12.8%), according to the 2018-2019 Global Entrepreneurship Monitor (GEM) report (Hamid et al., 2023). Therefore, fostering an entrepreneurial mindset in agriculture should begin at the university level (Novanda et al., 2020). In this context, over 80% of experts consulted in the National Expert Survey conducted by the GEM program agreed that education is one of the top three constraints on entrepreneurship in Egypt. In fact, Egypt ranked last among the 31 countries included in the study regarding the educational system's contribution to entrepreneurship. The primary recommendation from the National Expert Panel was to “reform Egypt's education system.” This conclusion aligns with findings from the 2009 Egypt Competitiveness Report (National Competitiveness Council, 2009), which determined that higher education is one of the critical areas needing improvement if Egypt aims to compete globally (Kirby & Ibrahim, 2011).

Pursuing a positive attitude toward agricultural entrepreneurship is essential for fostering a resilient agricultural sector capable of adapting to modern challenges and opportunities. Cultivating positive attitudes toward entrepreneurship among agriculture students and young entrepreneurs is crucial for the sustainability and growth of agribusinesses (Huang et al., 2022). Consequently, recent years have seen a growing emphasis on instilling and strengthening an entrepreneurial mindset among agriculture

students, equipping them with the skills and motivation needed to become successful entrepreneurs in the agricultural sector. Understanding the factors that influence entrepreneurial attitudes and intentions among agriculture students is critical for educators, policymakers, and stakeholders to develop effective strategies and programs that nurture entrepreneurial spirit and create a supportive environment for agricultural entrepreneurship (Behera et al., 2023).

Ali et al. (2021) discuss how the entrepreneurial ecosystem—which includes resource availability, support systems, and cultural attitudes toward entrepreneurship—affects the entrepreneurial activities of farmers. Therefore, supporting this ecosystem is essential for creating a conducive environment for aspiring agricultural entrepreneurs. For instance, enhancing access to financial resources and support mechanisms can empower young people to take entrepreneurial risks and innovate in their practices (Jiang et al., 2019).

Additionally, Egypt's economic conditions play a significant role in shaping attitudes toward agricultural entrepreneurship. The availability of financial support and investment opportunities is essential for encouraging entrepreneurial initiatives among youth. Liu et al. (2014) emphasize that financial support is a critical factor in agricultural entrepreneurship, as it provides the necessary capital to start and sustain agricultural ventures. This is especially important in the Egyptian context, where access to financial resources can be a barrier for many aspiring young entrepreneurs. Furthermore, the impact of agricultural policies and government initiatives on entrepreneurship cannot be overlooked. Effective policies that promote entrepreneurial and agricultural innovation can create a more favorable environment for young people. For example, initiatives aimed at improving market access, providing training, and facilitating access to credit can significantly enhance youth attitudes and behaviors toward entrepreneurship (Saghaian et al., 2022).

In summary, attitudes toward agricultural entrepreneurship in Egypt are shaped by a complex interplay of educational influences, demographic factors, the entrepreneurial ecosystem, access to information and technology, community support, and economic conditions.

Efforts to foster the growth of young agricultural entrepreneurs primarily aim to increase youth interest and motivation in engaging in agricultural entrepreneurship. This goal is achieved through agricultural education and mentorship (training) for young people. To encourage the growth of agricultural entrepreneurship among youth, Hattab (2014) found a positive relationship between entrepreneurship education and entrepreneurial intentions among university students in Egypt. Devi (2015) and Kushwaha and Maru (2015) agreed that the attitude toward entrepreneurship is a critical factor in young people's choice to pursue agricultural entrepreneurship and become agricultural entrepreneurs.

The Theory of Planned Behavior (Ajzen, 1991) is a widely used theory in entrepreneurship that explains the behavioral approach to developing the intention to become an entrepreneur (Akash, 2022). This theory, an extension of the Theory of Reasoned Action, suggests that an individual's behavior is shaped by their intention or interest in acting. Ajzen's theory emphasizes that intentions and behaviors depend on attitudes toward specific behaviors, subjective norms, and perceived behavioral control (Adebayo & Kavoos, 2016; Saraswati & Setiyawati, 2021). The Theory of Planned Behavior also highlights that an individual's attitude is shaped by their beliefs about the subject of that attitude, which can be influenced by the information they receive about the subject (Ajzen, 2005). In other words, an individual's attitude toward a subject is formed by the information they have acquired

regarding it. Thus, access to information about the subject is essential for shaping attitudes. This access to information can come from various sources, such as schools (Lawver et al., 2018), print media, television programs, online articles and news, internet videos, and information exchange through social media (Yunandar et al., 2019).

According to this theory, building and nurturing young people's interests and motivations toward agricultural entrepreneurship requires fostering positive attitudes that support agricultural entrepreneurship. Developing an entrepreneurial mindset among youth is crucial, as Bakar et al. (2022) emphasized, as it can significantly impact their willingness to pursue careers in agriculture, thereby addressing issues related to unemployment and food security.

### **Research Problem:**

Due to Egyptians' general aversion to risk, there has historically been a reluctance to initiate personal entrepreneurial ventures. However, this trend has recently shifted, particularly among women and youth. According to the Global Entrepreneurship Monitor (GEM) report on Egypt for 2020–2021 (Ismail et al., 2018), societal values in Egypt have become more favorable toward entrepreneurship, with approximately 57% of non-entrepreneurial Egyptians surveyed expressing a desire to start a business within the next three years. This percentage ranks Egypt fifth among the countries included in the report. Entrepreneurship activities in Egypt have traditionally been limited due to insufficient financial and human resources needed to support startups or entrepreneurial initiatives. Nonetheless, Egypt has recently undertaken several reforms in trade, legal, and financial policies aimed at bolstering entrepreneurial activities (Mahrous et al., 2020).

Agricultural entrepreneurship has increasingly come to be viewed as a vital factor in promoting economic development and expanding employment opportunities, necessitating an exploration of the prevailing attitudes toward it among youth, especially university students. Based on Ajzen's (1991) Theory of Planned Behavior, fostering positive attitudes toward agricultural entrepreneurship among young people is essential for supporting their engagement in this field post-graduation. However, findings from previous studies (Mohamed, 2021; Youssef, 2021; Harhash, 2022; Laban & Nweir, 2022; Salem, 2023) indicate that more than 70% of surveyed university students exhibit either neutral or negative attitudes toward agricultural entrepreneurship. Therefore, an analytical study is warranted to assess the attitudes of agriculture students at Alexandria University toward agricultural entrepreneurship. This study aims to examine their level of access to relevant information and explore the relationship between personal and familial factors and their attitudes toward agricultural entrepreneurship.

### **Research Objectives**

The primary objective of this research is to explore the attitudes toward agricultural entrepreneurship among students of the Faculty of Agriculture at Alexandria University, Egypt. This objective can be achieved through the following specific objectives:

1. Identifying key personal and familial characteristics of the respondent students.
2. Determining the sources of information used by the respondent students regarding agricultural entrepreneurship.
3. Assessing the degree of the respondent students' attitudes toward agricultural entrepreneurship.
4. Identifying differences in attitudes toward agricultural entrepreneurship among the respondent students based on variations in studied descriptive variables.

5. Examining the correlational and regression relationships between the respondent students' attitudes toward agricultural entrepreneurship and the studied quantitative variables.

### **Research Importance**

#### **A. Theoretical Importance:**

The theoretical significance of this research lies in consolidating existing scholarly efforts related to the topic of entrepreneurship and contributing research findings that can serve as a foundation for future studies. This study addresses several new research variables. Consequently, the research methods and measures employed can be utilized in similar future studies to yield scientific results that either confirm or challenge previous findings, thereby enhancing the body of knowledge in this field.

#### **B. Practical Importance:**

The practical Importance of this research is rooted in understanding the attitudes of agricultural college students toward agricultural entrepreneurship. The importance of this research stems from both the relevance of the topic and the significance of the surveyed demographic. Agricultural entrepreneurship represents one of the fundamental solutions to the widespread unemployment issue among university youth in developing countries, including Egypt. Given that attitudes guide human behavior, understanding student attitudes can assist policymakers in identifying appropriate training programs and initiatives to foster an entrepreneurial mindset among university youth. This can be achieved by providing them with sufficient information to support positive attitudes and alter negative perceptions toward agricultural entrepreneurship.

### **Previous Studies**

#### **Kirby and Ibrahim (2011) - The Case for (Social) Entrepreneurship Education in Egyptian Universities**

The study was conducted on a sample of 183 students from the British University in Egypt. The findings revealed that students experience ambiguity regarding the concept of social entrepreneurship and the role of social entrepreneurs, and their knowledge of social entrepreneurs in Egypt is limited. While most students aspire to work in multinational corporations, a significant number express interest in establishing social enterprises, indicating a latent desire for social entrepreneurship that requires guidance and support.

#### **Hatab Study (2014)**

#### **Impact of Entrepreneurship Education on Entrepreneurial Intentions of University Students in Egypt**

The results indicated a positive relationship between entrepreneurship education and students' intentions and perceived desire; however, no clear relationship was found with perceived feasibility or self-efficacy. Given the importance of entrepreneurship, the study recommends reforming the educational system to enhance creativity and innovation among students.

#### **Yunandar et al. (2019)**

#### **Students' Attitude Towards Agricultural Entrepreneurship in Selected Vocational Colleges in Indonesia**

The study measured variables including access to information through lectures, traditional media, and the internet, alongside students' attitudes toward agricultural entrepreneurship. Data were analyzed using percentages, mean scores, and Spearman's correlation at a significance level of  $p = 0.05$ . The findings revealed that the internet ( $M = 3.27$ ) was the most accessible source for students to gain knowledge in agricultural

entrepreneurship, followed by classroom lectures ( $M = 3.18$ ) and traditional media ( $M = 2.94$ ). Additionally, students exhibited positive attitudes toward agricultural entrepreneurship ( $M = 3.63$ ). A statistically significant relationship was found between access to information via classroom lectures ( $r_s = 0.251$ ), traditional media ( $r_s = 0.156$ ), and the internet ( $r_s = 0.280$ ) and students' attitudes toward agricultural entrepreneurship. The study emphasized the importance of enhancing the roles of schools and the internet in shaping positive student attitudes toward agricultural entrepreneurship and recommended that the Indonesian government adopt this strategy to support the development of a young generation of agricultural entrepreneurs through targeted agricultural education and mentorship programs for youth.

**Malunga et al. (2020)**

#### **Demographic Factors Associated with Attitude of Youth Towards Agripreneurship**

The research aimed to assess the entrepreneurial attitudes of youth in Lesotho and analyze the demographic factors influencing these attitudes through a structured questionnaire administered to final-year students at the National University of Lesotho, achieving a response rate of 78.8%. The results indicated that the majority of youth held negative attitudes toward agripreneurship, underscoring the need for interventions to foster positive attitudes. Most demographic factors, except for one, were identified as significant indicators of entrepreneurial attitudes, which can be leveraged to target the youth market for stimulating agripreneurial activities in the country.

**Ali et al. (2021)**

#### **Entrepreneurship Ecosystem Performance in Egypt: An Empirical Study Based on the Global Entrepreneurship Index (GEI)**

The findings reveal that the "ambition" pillars play a positive role in the ecosystem, particularly emphasizing "process innovation" and "venture capital." However, there are significant shortcomings in the "capabilities" pillars, especially in "emerging opportunities" and "competition." Additionally, weak "entrepreneurial attitudes" were identified as a major barrier to achieving positive GEI outcomes in Egypt. The study suggests that "risk acceptance" and "networking" are the weakest aspects of the system, necessitating the development of national policies and strategies to enhance these areas, which could potentially improve Egypt's education outcomes by 2%.

**Youssef Study (2021)**

#### **Attitudes of University Youth Towards Entrepreneurship: A Field Study**

This study aimed to measure the level of knowledge and attitudes of final-year agricultural students at Damanhour University towards entrepreneurship, as well as to identify the socio-economic factors affecting these attitudes. It also sought to uncover the obstacles faced in promoting an entrepreneurial culture from the students' perspectives. The study was conducted on a random sample of 160 students from a total of 778 final-year students, using a questionnaire to collect data. The analysis relied on simple correlation tests and stepwise regression to measure the impact of independent variables such as family size, household income, and ambition level on students' attitudes towards entrepreneurship. The results showed that the majority of students had a neutral attitude towards entrepreneurship, with 71.2% of students being neutral, while only 6.9% held a positive attitude. The study revealed significant differences between urban and rural students, with rural students exhibiting higher entrepreneurial attitudes. The study concluded with recommendations for

universities to adopt strategies that promote an entrepreneurial culture and shift prevailing attitudes among students.

### **Lebn and Noysser (2022)**

#### **Attitudes of Rural University Youth Towards Entrepreneurship Culture in Sharqia Governorate**

The research employed a social survey methodology, collecting data through an electronic questionnaire from a random sample of 371 students from the Faculty of Arts and the Faculty of Agriculture at Zagazig University. Data analysis utilized simple correlation coefficients, multiple stepwise regression, and T-tests to study significant differences between variables. The results indicated that the majority of students had a moderate attitude towards entrepreneurship, with significant differences based on the type of college favoring students in scientific disciplines. Factors such as cultural and geographic openness, community engagement, ambition level, leadership, and responsibility significantly contributed to explaining the variance in entrepreneurial attitudes among students. The study highlighted community and educational obstacles as the most critical challenges to promoting entrepreneurship culture among rural students.

### **Hattab (2023)**

#### **Assessing the Entrepreneurship Ecosystem in Egypt through a Gender Lens**

These results revealed that the participation of women in business remains low, with a female entrepreneurial activity rate of 5.7% compared to 16.7% for men. Utilizing an exploratory methodology that includes semi-structured interviews with ten female entrepreneurs and an online survey, the study found that female entrepreneurs do not perceive direct discrimination but encounter challenges related to practices that do not account for gender differences. The findings contribute to the literature on women's entrepreneurship and provide recommendations to enhance female participation in Egypt's entrepreneurship ecosystem.

### **Research Methodology**

#### **Operational Definitions of Some Research Variables and How to Measure Them:**

- Field of Study: Refers to the academic specialization registered by the student, coded as follows: Plant Production (1), Animal Production (2), Food Sciences (3), Plant Protection (4), Agricultural Biotechnology (5), Agricultural Economic and Social Sciences (6), Soil and Water (7), Agricultural Engineering and Biophysical Systems (8).
- Father's Occupation: Refers to the occupation of the father, which serves as a source of family income. It is coded as follows: Government or Non-Government Employment (1), Craft or Agricultural Work (2), Private Business (3), Retired (4).
- Place of Residence: Refers to the location of the full-time residence of the respondent coded as follows: Rural (1), Urban (2).
- Participation in University Activities: Refers to the extent of the respondent's involvement in any university activities. It is coded as follows: Yes (2), No (1).
- Engagement in Temporary Employment: Refers to whether the respondent is engaged in temporary work. It is coded as follows: Yes (2), No (1).
- Monthly Family Income: Refers to the total approximate monthly income of the family, coded as follows: Less than 5000 EGP (1), 5000–10000 EGP (2), More than 10000 EGP (3).
- Exposure to Information Sources: Refers to the use of information sources to gather information about agricultural entrepreneurship. It is measured by asking the respondent about their exposure to eight sources from which they can obtain information about

agricultural entrepreneurship. A score of one is given for each source used, and the total score reflects this variable.

- Self-Efficacy Expectations: Refers to the respondent's self-assessment concerning their ability to overcome challenges in achieving their goals and their confidence in completing tasks and plans they set for themselves. This is measured using nine statements on a four-point scale (Always, Sometimes, Rarely, Not Applicable), with the following scores assigned: (3, 2, 1, 0) according to the respondent's answers, respectively. The total score reflects this variable.

- Family Support: Refers to the extent of genuine help and support from family members, as well as the degree of satisfaction with this support and belief in its adequacy. It is measured through eight statements on a four-point scale (Always, Sometimes, Rarely, Not Applicable), with the following scores assigned for positive statements: (3, 2, 1, 0) according to the responses, and for negative statements: (0, 1, 2, 3) respectively. The total score reflects this variable.

- Sense of Responsibility: Refers to the respondent's commitment to accuracy and seriousness in performing tasks assigned to them, regardless of their difficulty level. This is measured through ten statements on a four-point scale (Completely Apply, Moderately Apply, Weakly Apply, Do Not Apply), with scores assigned as follows for positive statements: (3, 2, 1, 0) according to the responses, and for negative statements: (0, 1, 2, 3) respectively. The total score reflects this variable.

- Perseverance: This term refers to the extent to which the respondent strives and dedicates effort to continue working for an extended period to overcome obstacles until achieving their goals. It was measured using eight statements on a four-point scale (strongly agree, moderately agree, slightly disagree, and do not agree), with scores assigned as follows for positive statements: 3, 2, 1, and 0, respectively. For negative statements, the scores were 0, 1, 2, and 3. The total scores obtained by the participant were summed to represent this variable.

- Time Awareness: This refers to the degree to which the participant treats time with the utmost seriousness and is diligent in completing their duties on time. It was measured using eight statements on a four-point scale (strongly agree, moderately agree, slightly disagree, and do not agree), with scores assigned as follows for positive statements: 3, 2, 1, and 0, respectively. For negative statements, the scores were 0, 1, 2, and 3. The total scores obtained by the participant were summed to represent this variable.

- Future Planning: This indicates the extent to which the participant prepares plans for tasks they intend to carry out in the future. It was measured using nine statements on a four-point scale (strongly agree, moderately agree, slightly disagree, and do not agree), with scores assigned as follows for positive statements: 3, 2, 1, and 0, respectively. For negative statements, the scores were 0, 1, 2, and 3. The total scores obtained by the participant were summed to represent this variable.

- Aspiration for Excellence and Ambition: This refers to the extent to which the participant consistently exerts effort to improve their performance level to achieve the highest possible rating. It was measured using nine statements on a four-point scale (strongly agree, moderately agree, slightly disagree, and do not agree), with scores assigned as follows for positive statements: 3, 2, 1, and 0, respectively. For negative statements, the scores were 0, 1, 2, and 3. The total scores obtained by the participant were summed to represent this variable.

- Students' Attitudes Towards Agricultural Entrepreneurship: This term refers to the participant's stance towards agricultural entrepreneurship, whether they prefer it or not. The



study examined attitudes from three aspects: cognitive, affective, and behavioral. The cognitive aspect reflects the participant's possession of information related to agricultural entrepreneurship, such as the fundamentals of building entrepreneurial projects, the risks faced by youth in entrepreneurial ventures, and the characteristics of a successful entrepreneur. The affective aspect encompasses all feelings of love or dislike that the participant directs towards agricultural entrepreneurship, such as their preference for working in agricultural entrepreneurial projects. The behavioral aspect relates to the participant's actual behavior towards agricultural entrepreneurship, including their efforts to seek out new information about agricultural entrepreneurship, their interest in the lives of successful entrepreneurs, and their pursuit of training in entrepreneurship during their studies. The attitude was measured using thirty-five statements, of which twelve represented the cognitive aspect, eleven represented the affective aspect, and twelve represented the behavioral aspect, using a three-point scale (strongly agree, moderately agree, and disagree). The scores were assigned as follows for positive statements: 3, 2, and 1, respectively. For negative statements, the scores were 1, 2, and 3. The total scores obtained by the participant were summed to represent this variable.

### **Research Hypotheses**

- To verify the fourth objective, the following two hypotheses were formulated:

Hypothesis 1: There is no statistically significant difference between the mean attitudes of the surveyed students towards agricultural entrepreneurship based on differences in gender, academic year, place of residence, participation in university activities, and employment in temporary jobs, each considered separately.

Hypothesis 2: There are no statistically significant differences between the mean attitudes of the surveyed students towards agricultural entrepreneurship based on differences in academic specialization, parental occupation, and family income.

- To verify the fifth objective, the following two hypotheses were formulated:

Hypothesis 3: There is no statistically significant correlation between the attitudes of the surveyed students towards agricultural entrepreneurship and each of the following quantitative independent variables: age, exposure to information sources, self-efficacy expectations, family support, sense of responsibility, perseverance, time awareness, future planning, and aspiration for excellence and ambition.

Hypothesis 4: The studied independent variables—age, exposure to information sources, self-efficacy expectations, family support, sense of responsibility, perseverance, time awareness, future planning, and aspiration for excellence and ambition—do not significantly affect the variation in the surveyed students' attitudes towards agricultural entrepreneurship as the dependent variable.

### **Research Area, Population, and Sample**

This study was conducted at the Faculty of Agriculture (Shatby) at Alexandria University, which is one of the oldest agricultural colleges in Egypt, renowned for its diverse agricultural specializations. The research population included all third- and fourth-year students at the Faculty of Agriculture, Alexandria University, for the academic year 2023-2024, totaling 2,208 participants as recorded in the college's registers. A random sample of 12% was selected from this population, resulting in a research sample size of 265 participants, ensuring representation from all fields within the college in the research sample.

### **Data Collection Method**

To achieve the research objectives, a questionnaire was developed, ensuring that the questions were logically linked to the overarching research problem. A preliminary test (pre-test) of the research questionnaire was conducted with 30 randomly selected participants outside the research sample to assess the appropriateness of the questions for the research goals and the accuracy and clarity of the questions. Based on the feedback from this preliminary test, necessary revisions were made to the questionnaire, which was then finalized. The data were collected through personal interviews with the participants during the second semester (April and May) of 2024.

### **Data Analysis Method**

In light of the nature of the research objectives, the following statistical methods were employed: frequency tables, percentages, mean, standard deviation, relative weight, Pearson's correlation coefficient, multiple regression analysis, independent samples t-test, and one-way analysis of variance (ANOVA). These analyses were conducted using SPSS version 25.

#### **- Relative Weight Calculation Formula:**

**Relative Weight (%)** =  $(\text{Number of respondents per category} \times \text{Category weight}) \div (\text{Total number of the sample} \times \text{Highest weight})$

### **Results and Discussion**

The results presented in Table (1) highlight the characteristics of the surveyed students from the Faculty of Agriculture at Alexandria University. The findings indicate that the proportion of female students (62.3%) exceeds that of male students (37.7%), reflecting a higher presence of female students in the sample. Regarding academic distribution by year, the sample is nearly evenly divided between third-year students (51.7%) and fourth-year students (48.3). In terms of academic disciplines, the results show notable diversity, with Agricultural Engineering and Biosystems ranking first at 19.6%. This may be linked to the innovation opportunities in this field compared to other disciplines, such as Agricultural Biotechnology, which recorded the lowest percentage (6.4%). Considering family background, most students' fathers are employed in governmental or non-governmental positions (45.3%), while a significant percentage (19.2%) are retirees. This indicates a variety of economic and social backgrounds among the students. Regarding residency, the vast majority of students come from urban areas (80.8%), which may influence their perceptions of agricultural entrepreneurship opportunities compared to their peers from rural areas. Finally, it is noteworthy that a significant portion of the students (74.3%) do not participate in university activities, which may suggest a lack of engagement in activities that could enhance their entrepreneurial skills. Additionally, approximately 40% of the students hold temporary jobs, indicating a possible need for extra financial support or the desire to gain early practical experience.

**Table (1) Distribution of Surveyed Students According to Their Personal and Family Descriptive Characteristics (N=265)**

Characteristics	Categories	F	%
Gender	Male	100	37.7
	Female	165	62.3
Academic Year	Third Year	137	51.7
	Fourth Year	128	48.3
Field of Academic Specialization	Plant Production	31	11.7
	Animal Production	46	17.4
	Food Sciences	46	17.4
	Plant Protection	29	10.9
	Agricultural Biotechnology	17	6.4
	Agricultural Economics and Social Sciences	26	9.8
	Soil and Water	18	6.8
	Agricultural Engineering and Biological Systems	52	19.6
Father's Occupation	Job (Governmental or Non-Governmental)	120	45.3
	Craft or Agricultural Work	35	13.2
	Private Business	30	11.3
	Retired	51	19.2
	Deceased	29	10.9
Place of Residence	Deceased	51	19.2
	Urban	214	80.8
Participation in University Activities	Yes	68	25.7
	No	197	74.3
Engagement in Temporary Work	Yes	106	40.0
	No	159	60.0
Monthly Family Income (in EGP)	Low (Less than 5000 EGP)	107	40.4
	Medium (5000-10000 EGP)	126	47.5
	High (More than 10000 EGP)	32	12.1

**Source:** Field Data, 2024.

Table (2) illustrates the distribution of students according to their quantitative personal characteristics, providing important indicators related to opportunities for advancement in the field of entrepreneurship. The results indicate that the largest age group among the students is between 21 and 23 years old (89.1%). This age group is characterized by energy and ambition, positioning them ideally to adopt entrepreneurial ideas. This age represents a transitional phase between education and professional life, motivating students to explore new opportunities and take risks in starting their own ventures. Additionally, 51.7% of the students exhibit high self-efficacy expectations, reflecting their strong confidence in their ability to achieve their goals. This self-confidence is essential in entrepreneurship, as facing challenges and risks is an integral part of building any project. Moreover, the results reveal that family support plays a crucial role, with 65.3% of students receiving high levels of support from their families. Family support not only provides material or moral resources but also enhances the psychological stability that may encourage individuals to start new projects. Furthermore, 64.9% of students demonstrate a moderate level of responsibility, which is an important trait for emerging entrepreneurs. This percentage reflects their

readiness to organize their time and efforts effectively, even if they have not yet reached the high level of commitment necessary for complete success. The results emphasize the importance of developing and nurturing this sense of responsibility to prepare them better for the demands of entrepreneurship.

Perseverance also emerges as a prominent trait among the students, with 33.2% displaying a high level of perseverance, which is crucial for overcoming recurring challenges in the entrepreneurial environment. Additionally, nearly half of the students (50.9%) recognize the importance of time management, a fundamental skill that enables entrepreneurs to maximize their productivity and organize their tasks effectively. Moreover, 58.5% of the students possess a high capacity for future planning, a strategic skill necessary for guiding entrepreneurial projects towards success and avoiding potential risks. Finally, 27.2% of the students exhibit a strong ambition to excel, serving as a key motivator for innovation and tangible achievements in their entrepreneurial projects. In summary, these results demonstrate that the students possess strong personal traits that qualify them for entry into the entrepreneurial world, particularly if these traits are enhanced through specialized training programs that support the development of their skills in strategic planning, time management, and perseverance.

**Table 2: Distribution of Surveyed Students According to Quantitative Personal Characteristics (N = 265)**

Characteristics	Categories	Count	%	Mean	SD
Age (Years)	(18-20)	28	10.6	21.5	0.9
	(21-23)	236	89.1		
	≥ 24 years	3	1.1		
Self-Efficacy Expectations	(6-12)	11	4.2	20	4.2
	(13-19)	117	44.2		
	≥ 20 years	137	51.7		
Family Support	(2-8)	17	6.4	17.6	5.2
	(9-15)	75	28.3		
	≥ 16 years	173	65.3		
Sense of Responsibility	(10-16)	58	21.9	19.4	3.5
	(17-23)	172	64.9		
	≥ 24 years	35	13.2		
Perseverance	(9-13)	21	7.9	17.3	3
	(14-18)	156	58.9		
	≥ 19 years	88	33.2		
Sense of Time Importance	(6-11)	9	3.4	17.5	3.2
	(12-17)	121	45.7		
	≥ 18 years	135	50.9		
Future Planning	(10-14)	12	4.5	20.2	3.3
	(15-19)	98	37.0		
	≥ 20 years	155	58.5		
Pursuit of Excellence and Ambition	(10-15)	48	18.1	19.2	3.8
	(16-21)	145	54.7		
	≥ 18 years	72	27.2		

Source: Field Data, 2024.

### Exposure to Information Sources

The results in Table (3) show the distribution of surveyed students based on the number of information sources they are exposed to regarding entrepreneurship. The results indicate that the majority of students (56.2%) rely on only one or two sources of information about entrepreneurship, suggesting a significant dependence on limited information sources. This lack of diversity may hinder their knowledge development and adequate understanding of entrepreneurship concepts. On the other hand, approximately 35.8% of students are exposed to three to four sources of information, reflecting a broader access to knowledge, but still requiring more diversity to meet their entrepreneurial learning needs. Meanwhile, only 7.9% of students are exposed to a large number of sources (five or more), indicating that access to diverse and in-depth information about entrepreneurship is not common among them. These results highlight the need to enhance students' access to diverse and comprehensive information sources regarding entrepreneurship, whether through educational institutions, media, or the internet. This step is essential to support the development of their skills and capabilities in this field. Overall, these figures reflect a gap in exposure to information sources related to entrepreneurship, which can pose a challenge to developing entrepreneurial ideas among youth. However, it also opens opportunities for intervention by providing more diverse resources and encouraging students to utilize them to enhance their entrepreneurial abilities.

**Table (3): Distribution of Respondents According to Exposure to Information Sources on Entrepreneurship (N= 265)**

Characteristics	Categories	Count	%	Mean	SD
Exposure to Information Sources (Score)	1-2	149	56.2	2.4	1.5
	3-4	95	35.8		
	≥ 5	21	7.9		

Source: Field Data, 2024.

### Sources of Information on Entrepreneurship

The results presented in Table (4) illustrate the ranking of information sources accessed by the surveyed students in the field of entrepreneurship. According to the findings, the college ranks as the primary source of information, with 78.1% of students indicating that it is their main resource. This underscores the role of higher education as a cornerstone in shaping their knowledge and understanding of entrepreneurship, highlighting the importance of providing diverse and rich educational content in this area. This aligns with the assertions made by Kirby & Ibrahim (2011) and Hattab (2014) regarding the necessity for Egyptian universities to equip students with the skills and attitudes required to engage in entrepreneurship and enhance entrepreneurial skills among students.

Social media ranks second, with 54% of students reporting its use as a source of information. This result reflects the increasing influence of digital platforms in disseminating knowledge and facilitating access to information. Internet pages received 48.7%, indicating students' reliance on various digital resources to broaden their understanding of entrepreneurship. These findings emphasize the need to enhance the role of information technology in shaping attitudes toward agricultural entrepreneurship, as confirmed by Nurlaela et al. (2022), which strengthens the overall perception of agricultural entrepreneurship as a promising career path. Conversely, traditional sources such as reading entrepreneurship books and attending training courses ranked lower, with the former at 16.6% and the latter at 16.2%. This suggests that students may prefer quick and readily

available information online rather than traditional sources, which could impact the depth of their knowledge. Friends, television, family, and neighbors occupied the last ranks, showing low exposure to information (12.5%, 12.1%, and 5.7%, respectively). These results reflect the need to strengthen community ties and social interactions among students to enhance their knowledge and experiences in entrepreneurship. Additionally, these findings reveal the limited role of media, particularly television, in conveying information about entrepreneurship to cultivate an entrepreneurial mindset among youth. Similarly, the data highlight the weak role of families in providing informational support to youth regarding entrepreneurship, which may be attributed to the lack of a widespread entrepreneurial culture.

Overall, the results emphasize the need to focus on enhancing educational sources and expanding access to information through various platforms, helping students acquire deeper skills and concepts in the field of entrepreneurship. This requires integrated educational strategies to foster positive attitudes and encourage students to explore opportunities in agricultural entrepreneurship, ultimately contributing to the development of this vital sector.

**Table (4): Ranking of Information Sources Based on Students' Exposure**

<b>Exposure to Information Sources</b>	<b>F</b>	<b>%</b>	<b>Rank</b>
University	207	78.1	1
Social media	143	54	2
Online Pages	129	48.7	3
Reading Books on Entrepreneurship	44	16.6	4
Attending Entrepreneurship Training Courses	43	16.2	5
Friends	33	12.5	6
Television	32	12.1	7
Family and Neighbors	15	5.7	8

Source: Field Data, 2024.

### **Students' Attitudes Toward Agricultural Entrepreneurship**

The data presented in Table (5) indicate that 51.7% of the surveyed students hold a neutral attitude toward agricultural entrepreneurship, suggesting they may lack strong impressions or sufficient information to form a specific opinion about this field. This neutral stance represents an opportunity, as it could be indicative of the potential for positive influence on these students' opinions through the provision of necessary information and resources. In contrast, the segment displaying a negative attitude, accounting for 26% of the students, may be attributed to a lack of knowledge or past negative experiences. This reflects their insufficient information about entrepreneurship, which is a primary factor in shaping attitudes toward any subject. Ajzen (2005) noted that an individual's attitude toward a topic is formed through the information they receive about it. These findings align with the results of studies by Mohammed (2021), Youssef (2021), Harhash (2022), and Salem (2023). In this context, it is crucial to enhance educational programs and training workshops that highlight success stories in agricultural entrepreneurship and provide necessary information about the challenges and available opportunities. Additionally, encouraging communication between current entrepreneurial students and successful graduates can help build confidence and inspiration. Furthermore, universities and educational institutions should adopt marketing strategies that include activities aimed at raising students' awareness of the importance of agricultural entrepreneurship, which will contribute to shifting negative attitudes to positive ones.

**Table (5): Distribution of Surveyed Students According to Their Attitudes Toward Agricultural Entrepreneurship**

	Categories	Count	%	Mean	SD
Students' Attitudes Toward Agricultural Entrepreneurship	Negative (35-58)	69	26.0	78.6	8.1
	Neutral (59-82)	137	51.7		
	Positive ( $\geq 83$ )	59	22.3		

Source: Field Data, 2024.

The data in Table (6) indicate the relative weight of positive statements related to students' attitudes toward agricultural entrepreneurship. The statement expressing a love for work that allows them the freedom to perform tasks in their own style ranks first, with a relative weight of 91.6%. This underscores the importance of freedom and flexibility in work. The ability to take calculated risks comes in second, with a relative weight of 87.7%, highlighting students' recognition of the significance of well-considered boldness in investment decisions. Additionally, statements emphasizing the importance of selecting suitable individuals and increasing employment opportunities reflect crucial factors for success. However, some statements, such as "I educate my friends about participating in entrepreneurship projects" and "I turn to supportive organizations for entrepreneurship project information," received lower relative weights (74.5% and 72.6%, respectively). This indicates an opportunity to improve students' awareness of the importance of communication with others. Consequently, the results reflect the necessity to enhance education and training in areas that support entrepreneurship and emphasize the importance of developing awareness programs that encourage students to actively participate in entrepreneurship communities.

**Table (6): Relative Weight of Positive Statements Regarding Students' Attitudes Toward Agricultural Entrepreneurship**

Positive Statements	Level of Agreement			Relative Weight (%)	Rank
	Strongly Agree	Partially Agree	Disagree		
-I love work that gives me the freedom to perform my tasks in a way that suits me.	201	61	3	91.6	1
-A successful entrepreneur is characterized by the ability to take calculated risks.	172	88	5	87.7	2
-An entrepreneur can choose the right individuals for the job.	167	95	3	87.3	3
-Entrepreneurship increases the potential for diversifying the national economy's exports.	168	92	5	87.2	4
-Entrepreneurship leads to the opening of new fields for employment.	168	91	6	87.0	5
-Entrepreneurship provides job satisfaction for the individual as a result of engaging in suitable work.	163	99	3	86.8	6
-Entrepreneurship relies on experience and knowledge of the market.	158	100	7	85.7	7
-An entrepreneur is characterized by independence in work.	155	99	11	84.8	8
-Entrepreneurship aims to achieve self-sufficiency in society.	147	114	4	84.7	9
-Entrepreneurship is flexible and avoids routine procedures in work.	149	106	10	84.2	10
-I like to start my career with my own project.	131	116	18	80.9	11

**continued Table (6): Relative Weight of Positive Statements Regarding Students' :Continued Attitudes Toward Agricultural Entrepreneurship**

Positive Statements	Level of Agreement			Relative Weight (%)	Rank
	Strongly Agree	Partially Agree	Disagree		
-I make it a point to learn about the lives, successes, and experiences of prominent entrepreneurs.	131	104	30	79.4	12
-I prefer entrepreneurship projects over other types of work.	103	152	10	78.4	13
-I am aware of the risks facing young people in entrepreneurship projects.	114	129	22	78.2	14
-I prefer difficult work that requires high capabilities and skills.	109	127	29	76.7	15
-I tend to work boldly in situations characterized by high risk.	107	128	30	76.4	16
-I know the fundamentals of building entrepreneurship projects.	95	143	27	75.2	17
-I search the internet for everything new about entrepreneurship.	108	117	40	75.2	17
-I participate in raising awareness among my friends about engaging in entrepreneurship projects.	97	133	35	74.5	19
-I turn to supportive entities for entrepreneurship projects to obtain information.	96	120	49	72.6	20
-I strive to attend conferences related to entrepreneurship projects.	78	121	66	68.2	21
-I follow newsletters published by organizations working in the field of entrepreneurship.	76	124	65	68.1	22
-I participate in discussions related to entrepreneurship projects.	76	123	66	67.9	23
-I participate in exhibitions related to products from entrepreneurship projects.	72	114	79	65.8	24

.Source: Field Data, 2024

The results of the analysis of negative statements related to students' attitudes toward agricultural entrepreneurship Table (7) indicate a notably positive stance. Students reject many views that reflect a negative perception of entrepreneurship, demonstrating their awareness and understanding of the value of this field. One of the key points is that students reject the notion that they have no idea about the concept of entrepreneurship, with this statement receiving a relative weight of 74.6%. This indicates that they possess the necessary knowledge to understand the foundations and significance of entrepreneurship. Additionally, students express the belief that training in entrepreneurship during their studies is not a waste of time, as this statement received a relative weight of 73.6%. This shows that they consider such training an important step in enhancing the skills and experiences necessary to enter this field. Furthermore, students show a desire to take on responsibility and lead teams, indicating a preference for leadership roles over working under others' management. This reflects their aspirations for active participation in teams and entrepreneurial initiatives, and they show a readiness to face challenges. Moreover, students exhibit openness to taking risks in entrepreneurship, as they prefer to explore opportunities in this field rather than solely pursue



government jobs, which may be perceived as safer. This shift in thinking illustrates their desire to invest their skills and innovations in private projects. Their positive attitude extends beyond a willingness to take risks; it also includes confidence in competing in the job market. They express rejection of the idea that they are unqualified to start their own ventures due to a lack of experience. On the contrary, they believe they have sufficient capabilities to tackle challenges, as evidenced by the results showing that they are not afraid of failing to achieve good economic returns from their projects, which received a relative weight of 56.0%. In conclusion, these results indicate that students are not only aware of the importance of entrepreneurship but are also enthusiastic about engaging in this field. Enhancing knowledge and training in agricultural entrepreneurship can have a significant positive impact on developing their skills and boosting their chances of success in the future. The students' positive attitude toward entrepreneurship represents a valuable opportunity to guide them toward career paths that enable them to innovate and contribute to economic development.

**Table (7): Relative Weight of Negative Statements Regarding Students' Attitudes Toward Agricultural Entrepreneurship**

Negative Statements	Level of Agreement			Relative Weight (%)	Rank
	Strongly Agree	Partially Agree	Disagree		
I have no idea what the concept of entrepreneurship means.	50	102	113	74.6	1
Training in entrepreneurship during studies is a waste of time.	54	102	109	73.6	2
I prefer to work under the management of others and avoid leading individuals in any work.	63	114	88	69.8	3
I will strive to work in a government job and will not take risks in the field of entrepreneurship.	64	117	84	69.2	4
I will guide my colleagues toward government work because it is more stable.	70	125	70	66.7	5
I prefer government work as it provides me with job and financial stability.	79	112	74	66.0	6
I am afraid of taking responsibility for any project on my own.	77	124	64	65.0	7
I fear competition in the job market.	70	140	55	64.8	8
I feel that I do not have enough experience to start my own project.	107	136	22	56.0	9
I am afraid that I will fail to achieve a good economic return from my own project.	109	132	24	56.0	9
It is easy to think of a project, but it is difficult to implement it.	128	117	20	53.1	11

.Source: Field Data, 2024

### Results in Light of Hypotheses

**- Results of the First Hypothesis Test:** The first hypothesis states that there is no statistically significant difference between the mean attitudes of surveyed students towards agricultural entrepreneurship based on gender, academic year, place of residence, participation in university activities, and temporary employment. To verify this hypothesis, an Independent Samples T-Test was conducted.

**The results of the first hypothesis test Table (8) reflect statistically significant differences between the mean attitudes of students toward agricultural entrepreneurship based on several factors.**

**1. Gender:** The results showed that male students have a higher mean attitude toward entrepreneurship (80.2) compared to females (77.6), with a t-value of 2.611 and a significance level of 0.01. This indicates that attitudes towards entrepreneurship may be more positive among males than females. This difference could be explained by social and cultural influences, where there may be preconceived beliefs about gender roles in the field of entrepreneurship. Additionally, the nature of most agricultural projects may align more closely with male students, leading females to prefer suitable employment over pursuing entrepreneurship. This finding aligns with Hattab's observations regarding the gender gap in entrepreneurship in Egypt, noting that male participation in agricultural entrepreneurship is higher, although there is a gradual increase in female participation, which can enrich the agricultural entrepreneurial landscape (Hattab, 2023).

Despite Egyptian women having positive attitudes toward entrepreneurship according to the Global Entrepreneurship Monitor (GEM) for Egypt 2020-2021, the overall entrepreneurial activity rate among Egyptian women was 5.7%, compared to 16.7% for Egyptian men. This makes the proportion of female entrepreneurs in Egypt one of the lowest in the Middle East and North Africa (Hattab, 2023), underscoring the need to support and encourage women to enter the field of entrepreneurship in Egypt.

**2. Academic Year:** The results indicate that third-year students have a higher mean attitude (79.6) towards entrepreneurship than fourth-year students (77.5), with a t-value of 2.105 and a significance level of 0.05. This difference may be attributed to third-year students being more open to new ideas and less burdened by pressures compared to their fourth-year peers, who may feel compelled to focus on traditional job opportunities. Furthermore, the entrepreneurship curriculum is taught to third-year students, so at the time of data collection, they had more information about entrepreneurship, which shapes their attitudes. This was reflected in the current study, which found that the college was the most significant source of information for the surveyed students regarding entrepreneurship.

**3. Participation in University Activities:** A statistically significant difference was found between the mean attitudes of students who participate in university activities (81.2) and those who do not (77.7), with a t-value of 3.135 and a significance level of 0.01. This difference can be explained by the fact that participation in university activities enhances teamwork and leadership skills, contributing to increased awareness of the importance of entrepreneurship. Additionally, participating students may have opportunities to meet successful entrepreneurs, which can inspire their entrepreneurial spirit, whereas non-participating students may miss out on these experiences.

**4. Place of Residence:** The results showed no statistically significant differences in mean attitudes based on place of residence (rural or urban), with a t-value of 1.250 and a significance level of 0.21. This suggests that educational and university environment factors may have a greater influence on attitudes toward entrepreneurship than the location of residence.

**5. Temporary Employment:** No statistically significant differences were found based on temporary employment status, with a t-value of 0.830 and a significance level of 0.41. This

may indicate that temporary work does not enhance entrepreneurial thinking to the same extent that university activities do.

Based on these results, it can be concluded that factors related to gender, academic year, and participation in university activities significantly influence students' attitudes towards entrepreneurship. This highlights the importance of enhancing educational programs and university activities to support positive attitudes towards entrepreneurship, especially among groups that may be less influenced. Additionally, the lack of significant impact from temporary work suggests that such employment may be primarily aimed at covering educational expenses rather than fostering future entrepreneurial ambitions.

**Table 8: Results of the t-test for the difference between the mean attitudes of the surveyed students towards agricultural entrepreneurship based on gender differences, academic year, place of residence, participation in university activities, and temporary employment status.**

Characteristics		N	Mean	SD	t-value	Level	Statistical Significance
Gender	Male	100	80.2	7.8	2.611	0.01	Statistically Significant
	Female	165	77.6	8.1			
Academic Year	Third Year	137	79.6	7.8	2.105	0.05	Statistically Significant
	Fourth Year	128	77.5	8.3			
Place of Residence	Rural	51	79.8	8.5	1.250	0.21	Not Statistically Significant
	Urban	214	78.3	8.0			
Participation in University Activities	Yes	68	81.2	8.6	3.135	0.01	Statistically Significant
	NO	197	77.7	7.8			
Temporary Employment	Yes	106	79.1	8.1	0.830	0.41	Not Statistically Significant
	NO	159	78.2	8.1			

.Source: Field Data, 2024

### Results of the Second Hypothesis Test

The second hypothesis states that there are no statistically significant differences between the mean attitudes of the surveyed students towards agricultural entrepreneurship based on differences in academic specialization, father's occupation, and family income. To verify this hypothesis, a One-Way ANOVA test was conducted.

The results in Table (9) indicate that there are no statistically significant differences in the mean attitudes of the surveyed students towards agricultural entrepreneurship based on the differences in academic specialization, as the F-value was 1.885 at a significance level of 0.07, which is not statistically significant. This means that the academic specialization of the students did not significantly affect their attitudes towards agricultural entrepreneurship. This result aligns with the study by Youssef (2021), which reached similar findings. These results can be explained by the fact that students, regardless of their academic specializations, rely on common sources of information about entrepreneurship, which reduces the variations among them. In this case, it appears that more than three-quarters of the students (78.1%) rely on the college as the primary source of information about entrepreneurship, as they study a

unified entrepreneurship curriculum for all students. In comparison, only a small percentage (5.7%) depend on other sources such as family and friends. This reliance on a single source of information may reduce the impact of academic specialization on shaping different attitudes and lead to convergence in students' views on entrepreneurship.

**Table 9: Results of the t-test for the difference between the mean attitudes of the surveyed students towards agricultural entrepreneurship based on differences in academic specialization, father's occupation, and family income.**

value	Students' Attitudes Towards Agricultural Entrepreneurship Based on Differences in	Mean	SD	F-value	Significance Level	Statistical Significance
Academic Specialization	Plant Production	81.4	6.9	1.885	0.07	Not Statistically Significant
	Animal Production	79.2	9.5			
	Food Sciences	77.3	8.0			
	Plant Protection	76.4	6.1			
	Biotechnology	77.7	7.6			
	Agricultural Economic and Social Sciences	75.7	8.3			
	Soil and Water	78.9	7.4			
	Agricultural Engineering	80.2	8.3			
Father's Occupation	Government or Non-Government Job	78.0	8.2	5.398	0.001	Statistically Significant
	Skilled or Agricultural Work	75.8	9.0			
	Own Business	83.5	6.3			
Family Income	Low (Less than 5000)	77.4	7.6	3.142	0.05	Statistically Significant
	Average (5000-10000)	78.9	8.3			
	High (More than 10000)	81.3	8.4			

Source: Field Data, 2024.

The results in Table (9) also indicate that there are statistically significant differences in the mean attitudes of the surveyed students towards agricultural entrepreneurship based on the father's occupation, with an F-value of 5.398 at a significance level of 0.001. This suggests that there is a notable impact of the father's occupation on the students' attitudes towards entrepreneurship. The results show that students whose fathers work in a private venture have the highest mean score (83.5) and a low standard deviation (6.3), indicating that these students may have more positive attitudes towards entrepreneurship compared to students whose fathers work in government or non-government jobs (mean of 78.0) or in skilled or agricultural work (mean of 75.8). This may be due to the fact that students raised in an environment that encourages private ventures have gained practical experience and more motivating perspectives towards entrepreneurship, while students whose fathers hold government or traditional jobs are influenced by a different stability pattern in employment.

Table (9) results also show statistically significant differences in the mean attitudes of the surveyed students towards agricultural entrepreneurship based on family income. This result indicates that family income has a significant impact on students' attitudes towards entrepreneurship. It is noted that students from high-income families (more than 10,000 EGP) have the highest mean score (81.3), suggesting that these students may have more positive attitudes towards entrepreneurship compared to students from low-income families (less than 5,000 EGP), who have a mean score of 77.4. This difference may be related to the resources available and the financial support that can encourage students to engage in entrepreneurial experiences with greater safety, compared to students from low-income families, who may have greater concerns about financial risks.

To further clarify, the results in Table (10) for the Post Hoc Comparisons (Bonferroni) indicate statistically significant differences in the mean attitudes of the surveyed students towards agricultural entrepreneurship based on the father's occupation. It is evident that students whose fathers work in private ventures have more positive attitudes towards entrepreneurship compared to those whose fathers work in government or non-government jobs, or in skilled or agricultural work. The difference in means between students from families engaged in private ventures and those from families with government or non-government jobs was 5.559, which was statistically significant at a significance level of 0.01. Similarly, the difference between students from private venture families and those from families with skilled or agricultural work was 7.732, which is also statistically significant at the 0.01 level. These results suggest that the nature of the father's work, particularly if the father is involved in a private venture, plays an important role in shaping students' attitudes towards entrepreneurship. In contrast, the differences between the other groups were not statistically significant, indicating that students from families with government jobs or skilled and agricultural work do not show significant differences in their attitudes towards entrepreneurship.

**Table (10) Results of the Bonferroni Post-Hoc Test to Identify the Cause of Significance of Differences Between the Mean Attitudes of the Surveyed Students Towards Agricultural Entrepreneurship Based on Differences in Father's Occupation.**

Attitudes of the Surveyed Students Towards Agricultural Entrepreneurship Based on Differences in Father's Occupation		Difference in Means	Significance Level	Statistical Significance
Job (Government or Non-Government)	Craft or Agricultural Work	2.17304	0.16	Not Statistically Significant
Private Project	Job (Government or Non-Government)	5.55917	0.01	Statistically Significant
	Craft or Agricultural Work	7.73221	0.01	Statistically Significant
	Retired	4.86595	0.55	Not Statistically Significant
Retired	Job (Government or Non-Government)	0.69323	0.61	Not Statistically Significant
	Craft or Agricultural Work	2.86626	0.11	Not Statistically Significant

Regarding the income variable, the results in Table (11) indicate that the significance of the differences is attributed to the difference between the mean scores of the high-income category and the low-income category, with a difference of 3.9 points in favor of the high-income category. This difference is statistically significant at a significance level of 0.05, indicating that students from high-income families have more positive attitudes towards entrepreneurship compared to those from low-income families. In contrast, the differences between the other means were not statistically significant, as their significance levels were greater than 0.05.

**Table (11) Results of the Bonferroni Post-Hoc Test to Determine the Significance of Differences Between the Averages of Respondents' Attitudes Towards Agricultural Entrepreneurship According to Family Income Differences**

Students' Attitudes Towards Agricultural Entrepreneurship Based on Differences in Family Income		Difference in Means	Significance Level	Statistical Significance
Medium (5000 - 10000 EGP)	Low (Less than 5000 EGP)	1.51474	0.15	Not Statistically Significant
High (Above 10000 EGP)	Low (Less than 5000 EGP)	<u>3.94038</u>	0.01	Statistically Significant
	Medium (5000 - 10000 EGP)	2.42564	0.13	Not Statistically Significant

The results of testing the third hypothesis, which states that there is no statistically significant correlational relationship between the attitudes of the surveyed students towards agricultural entrepreneurship and the following quantitative independent variables: age, exposure to information sources, self-efficacy expectations, family support, sense of responsibility, perseverance, time management, future planning, and the pursuit of excellence and ambition, were analyzed using the Pearson Correlation Coefficient.

The results of the correlational analysis between students' attitudes towards agricultural entrepreneurship and some independent variables Table (12) indicate variability in the strength and significance of these relationships. The relationship between age and students' attitudes did not show statistical significance, with a correlation coefficient of -0.085, suggesting that age does not significantly affect students' opinions towards entrepreneurship, possibly due to the lack of significant variation in the age variable, as most respondents are of similar age.

On the other hand, other variables showed positive relationships. The relationship between exposure to information sources and students' attitudes was statistically significant at the 0.01 level (correlation coefficient of 0.199), indicating that exposure to information sources enhances positive attitudes towards entrepreneurship, although the effect is weak. Regarding self-efficacy expectations, the relationship was statistically significant at the 0.01 level (correlation coefficient of 0.301), indicating that students' belief in their abilities positively influences their attitudes. This finding is supported by Cardon & Kirk (2013) and Liu et al. (2022), who confirmed that self-efficacy is a strong indicator of entrepreneurial behavior, suggesting that individuals who believe in their capabilities are more likely to persevere in the face of adversity. Additionally, family support was also important, as it was positively correlated (correlation coefficient of 0.158) with attitudes towards entrepreneurship.

Although family support is very important for encouraging a significant portion of the youth population to pursue agricultural entrepreneurship, particularly when adequate educational

and financial support is provided (Hattab, 2023), many families in Egypt face conditions that prevent them from offering such support. Nevertheless, the variables that exhibited the strongest correlations were feelings of responsibility (0.443), perseverance (0.474), and striving for excellence and ambition (0.502), all of which were statistically significant at the 0.01 level. These results suggest that students who exhibit greater responsibility, perseverance, and ambition are likely to develop more positive attitudes towards entrepreneurship. This finding aligns with Zhang et al. (2020), who stated that a strong sense of personal responsibility is a fundamental driver of entrepreneurial intentions among individuals. This is consistent with Sontay et al., who emphasize that responsibility is an important factor determining entrepreneurial traits, underscoring the importance of these qualities in fostering an entrepreneurial mindset among students (Sontay et al., 2019). Additionally, a study by Miniesy and Fakhreldin (2023) highlighted that students with a strong sense of responsibility are more likely to engage in entrepreneurial activities, as they recognize the significance of their actions and decisions in shaping their futures and the impact they have on society.

Overall, these results affirm the importance of psychological and social factors in shaping students' attitudes toward entrepreneurship, where perseverance and ambition play a central role in enhancing these attitudes. This is consistent with the findings of Gorgievski and Stephan, who noted that the psychological aspects of entrepreneurship, including a sense of responsibility, significantly influence decision-making and risk-taking behaviors (Gorgievski & Stephan, 20016). The importance of providing a supportive family and educational environment to foster these qualities in students is also highlighted. Based on the results of the Pearson correlation coefficient, the null hypothesis (H0) can be partially rejected in some aspects while it cannot be rejected in others.

**Table 12: Correlational Relationships Between Students' Attitudes Towards Agricultural Entrepreneurship and Studied Independent Variables**

<b>Independent Variables</b>	<b>Simple Correlation Coefficient</b>
Age	-0.085
Exposure to Information Sources	*.199
Self-Efficacy Expectations	** .301
Family Support	*.158
Sense of Responsibility	** .443
Perseverance	** .474
Sense of Time Importance	.287
Future Planning	** .440
Pursuit of Excellence and Ambition	** .502

\*Significant at the 0.01 probability level

\*\*Significant at the 0.01 probability level

### **Results of the Fourth Hypothesis Test**

The fourth hypothesis states that the studied independent variables—age, exposure to information sources, self-efficacy expectations, family support, sense of responsibility, perseverance, sense of time importance, future planning, and striving for excellence and ambition—do not significantly influence the variance in the surveyed students' attitudes toward agricultural entrepreneurship as a dependent variable. To test this hypothesis, a Multiple Linear Regression Analysis was employed.

To identify the most significant factors responsible for explaining the variance in the dependent variable, a Stepwise Multiple Linear Regression Analysis was conducted. The results presented in Table 13 indicate that the independent variables included in the stepwise regression model explain approximately 35.9% of the variance in students' attitudes toward agricultural entrepreneurship ( $R^2 = 0.359$ ). This suggests that other variables not addressed in the study may account for the remaining variance in the dependent variable, which should be considered in future research in this area. Additionally, the results in Table (13) reveal that the stepwise multiple linear regression model included four variables that significantly contribute to explaining the variance in students' attitudes toward agricultural entrepreneurship: striving for excellence and ambition contributes 25.2%, future planning contributes 6.2%, sense of responsibility contributes 3.6%, and self-efficacy expectations contribute 1%. Meanwhile, the partial regression coefficients for the remaining variables did not show significance at the alpha level of 0.05, indicating that the surveyed students' attitudes toward agricultural entrepreneurship are not influenced by these variables while controlling for the effects of the other independent variables studied.

These findings underscore the importance of developing psychological traits such as ambition and planning to enhance students' attitudes toward agricultural entrepreneurship. They also highlight the necessity of providing educational and psychological support to foster these values among students. Based on the results of the stepwise multiple linear regression analysis, the null hypothesis can be partially rejected, while some parts cannot be rejected.

**Table (13) Multiple Stepwise Regression Analysis Between Students' Attitudes Toward Agricultural Entrepreneurship as the Dependent Variable and the Studied Independent Variables**

Variables Included in the Model	Partial Regression Coefficient	t Value	Cumulative Value of Explained Variance in the Dependent Variable $R^2$	% of Explained Variance in the Dependent Variable	F Value
Striving for Excellence and Ambition	0.546	3.840	0.252	25.2	<b>36.431</b>
Future Planning	0.591	3.905	0.313	6.2	
Sense of Responsibility	0.524	3.646	0.349	3.6	
Self-Efficacy Expectations	0.251	2.007	0.359	1	

\*Significant at the 0.05 level

\*\*Significant at the 0.01 level

### Limitations and Constraints of the Study

There are several limitations that may affect the generalization and application of the results. These limitations include:

1. **Sample Size Limitations:** The study was conducted on a random sample of third- and fourth-year students from the Faculty of Agriculture at Alexandria University, which may not fully represent the attitudes of agricultural students across Egypt or in other regions.
2. **Environmental and Social Influences:** Students' social and cultural backgrounds vary according to geographic regions, educational levels, and family income, which may influence their attitudes toward agricultural entrepreneurship. This variability makes it difficult to generalize the results to all students in agricultural disciplines.
3. **Reliance on Self-Reported Data:** Data were collected through questionnaires based on students' self-assessments, which may affect the accuracy of some information, particularly regarding attitudes toward entrepreneurship and levels of self-efficacy.
4. **Limited Time Frame of the Study:** The study was conducted over a specific time period, which may influence the stability of attitudes and perceptions. These attitudes may change



over time in response to economic and social changes, necessitating ongoing research to track these shifts.

These limitations highlight the need for broader studies that include diverse samples from different colleges and regions, as well as the use of additional research tools, such as in-depth interviews and longitudinal studies, to gain a deeper and more comprehensive understanding of students' attitudes toward agricultural entrepreneurship.

**Recommendations:**

1. Enhance Access to Information: Since 56.2% of students rely on only one or two sources of information regarding entrepreneurship, it is recommended to develop a digital library or online platform that provides access to diverse and multiple resources in this field.
  2. Encourage Participation in University Activities: Given that 74.3% of students do not participate in university activities, programs should be created to incentivize students to engage in activities that enhance their entrepreneurial skills, such as business idea competitions.
  3. Provide Practical Training Opportunities: As 40% of students work in temporary jobs, it is recommended to establish partnerships with agricultural companies to offer practical training opportunities that contribute to the development of students' entrepreneurial skills.
  4. Increase Awareness of Agricultural Entrepreneurship: Since 51.7% of students have a neutral attitude toward entrepreneurship, awareness campaigns and informational seminars should be organized to explain the benefits and challenges associated with agricultural entrepreneurship.
  5. Develop Self-Efficacy Skills: To enhance students' confidence in their self-efficacy, it is recommended to conduct specialized workshops that focus on building personal skills, such as leadership and negotiation, which may encourage their involvement in entrepreneurship.
- These recommendations are based on the findings of the study and aim to improve the agricultural entrepreneurship environment among students.

## References

- Adebayo, G.S., & Kavoos, M. (2016). The present attitude of African youth towards entrepreneurship. *International Journal of Small Business and Entrepreneurship Research*, 4(1), 21-38.
- Agriculture Organization (FAO) (Ed.). (2014). *State of Food Insecurity in the World: 2014: Strengthening the Enabling Environment for Food Security and Nutrition*. Food & Agriculture Organization of the UN (FAO).
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)
- Ajzen, I. (2005). *Attitudes, Personality, and Behavior*. Berkshire, England: Open University Press.
- Akash, A. (2022). A Study on the Correlation Between Entrepreneurial Intentions of Urban Adolescents. *Journal of Social Science and Humanities*, 4(10). [https://doi.org/10.53469/jssh.2022.4\(10\).02](https://doi.org/10.53469/jssh.2022.4(10).02)
- Ali, M. A., Kabil, M., Alayan, R., Magda, R., & Dávid, L. D. (2021). Entrepreneurship Ecosystem Performance in Egypt: An Empirical Study Based on the Global Entrepreneurship Index (GEI). *Sustainability*, 13(13), 7171. <https://doi.org/10.3390/su13137171>
- Amiry, H., Alibeigi, A., & Ghassempouri, H. (2015). Identify the Attitudes of Agricultural Postgraduate Students towards Motivations on Entrepreneurial Actions from the Viewpoint of Three Universities of (Razi, Bu-Ali-Sina and Ramin) in Iran. *Developing Country Studies*, 5(7), 80–84 <https://www.iiste.org/Journals/index.php/DCS/article/download/21316/21969>.
- Bakar, T. H. S. T. A., Hajar, R. S., Abdullah, F. A., Liew, J. Y., Nor, M. M., Norhafizah, M. Z., & Rosli, F. (2022). Youth Intention on Agricultural Entrepreneurship. *IOP Conference Series Earth and Environmental Science*, 1102(1), 012022. <https://doi.org/10.1088/1755-1315/1102/1/012022>
- Behera, R. K., Padhy, C., & Pattanaik, K. (2023). Factors affecting entrepreneurial attitude and intention of the agriculture students: A comprehensive review. *Journal of Survey in Fisheries Sciences*, 1876-1886. <https://sifisheressciences.com/index.php/journal/article/view/936>
- Cardon, M. S., & Kirk, C. P. (2013). Entrepreneurial Passion as Mediator of the Self-Efficacy to Persistence Relationship. *Entrepreneurship Theory and Practice*, 39(5), 1027–1050. <https://doi.org/10.1111/etap.12089>
- Devi, M.K.S. (2015). A study on the influencing factors for a literate youth to take up agricultural entrepreneurship. *International Journal of Management and Commerce Innovation*, 3(1), 692-700.
- Far, S. T., & Rezaei-Moghaddam, K. (2019). Multifunctional agriculture: an approach for entrepreneurship development of agricultural sector. *Journal of Global Entrepreneurship Research*, 9(1). <https://doi.org/10.1186/s40497-019-0148-4>
- Gorgievski, M. J., & Stephan, U. (2016). Advancing the Psychology of Entrepreneurship: A Review of the Psychological Literature and an Introduction. *Applied Psychology*, 65(3), 437–468. <https://doi.org/10.1111/apps.12073>
- Hamid, S. a. E., Biesi, M. E., & Anter, M. (2023). Exploring the Prospects and Obstacles of Entrepreneurial Tourism Development in Egypt: A Comprehensive Review. *Minia Journal of Tourism and Hospitality Research*, 15(2), 103–122. <https://doi.org/10.21608/mjthr.2023.202871.1090>
- Harhash, M. E., (2022). ASSOCIATED VARIABLES WITH AGRICULTURAL FACULTY STUDENTS' WILLINGNESS FOR ENTREPRENEURSHIP IN THE AGRICULTURE FIELD. *Journal of Agricultural and Environmental Sciences-Damanhour University*, 21(1), 1-17. <https://doi.org/10.21608/jaesj.2022.131555.1000>
- Hattab, H. W. (2014). Impact of Entrepreneurship Education on Entrepreneurial Intentions of University Students in Egypt. *The Journal of Entrepreneurship*, 23(1), 1–18. <https://doi.org/10.1177/0971355713513346>
- Hattab, H. W. (2023). Assessing the Entrepreneurship Ecosystem in Egypt through a Gender Lens. *Journal of Entrepreneurship and Project Management*, 8(1), 1–27. <https://doi.org/10.47941/jepm.1174>
- Huang, Y., Bu, Y., Liu, L., Xu, D., Xu, Z., & Zhao, G. (2022). Relationship Between Entrepreneurship Education Curriculum and Agricultural Students' Satisfaction in China. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.884565>

- Ismail, A., Tolba, A., Ghalwash, S., Alkhatib, A., Karadeniz, E. E., Ouazzani, K. E., Boutaleb, F., Belkacem, L., & Schøtt, T. (2018). Inclusion in entrepreneurship, especially of women, youth and unemployed: status and an agenda for research in Middle East and North Africa. *World Review of Entrepreneurship Management and Sustainable Development*, 14(4), 528. <https://doi.org/10.1504/wremsd.2018.093608>
- Jiang, L., Tong, A., Hu, Z., & Wang, Y. (2019). The impact of the inclusive financial development index on farmer entrepreneurship. *PLoS ONE*, 14(5), e0216466. <https://doi.org/10.1371/journal.pone.0216466>
- Kirby, D. A., & Ibrahim, N. (2011). The case for (social) entrepreneurship education in Egyptian universities. *Education + Training*, 53(5), 403–415. <https://doi.org/10.1108/00400911111147712>
- Kushwaha, B.P., & Maru, F.Y. (2015). The attitude of management students towards entrepreneur and entrepreneurship. *International Journal of Research in Management and Technology (IJRMT)*, 5(4), 2249-9563.
- Laban, H. A., & Nouisir, S. (2022). Rural university youth's attitudes towards entrepreneurship culture in Sharqia Governorate. *Journal of Agricultural Economics and Social Sciences*, 13(12), 507–518. <https://doi.org/10.21608/jaess.2022.176466.1119>
- Lawver, D.E., Baker, M., Gikunda, R.M., Magogo, J., & Kanyi, M. (2018). Entrepreneurial education in middle-level tertiary colleges in the Rift Valley of Kenya. *Journal of International Agricultural and Extension Education*, 25(3), 7-19. doi: 10.5191/jiaee.2018.25301
- Liu, D., Han, S., & Zhou, C. (2022). The Influence of Physical Exercise Frequency and Intensity on Individual Entrepreneurial Behavior: Evidence from China. *International Journal of Environmental Research and Public Health*, 19(19), 12383. <https://doi.org/10.3390/ijerph191912383>
- Liu, X., Li, L., Du, C., & Liu, Y. (2014). A Study on the Effectiveness of Financial Supports to the Entrepreneurship of Farmers—Based on the Data from 1978 to 2011 in China. *American Journal of Industrial and Business Management*, 04(09), 523–530. <https://doi.org/10.4236/ajibm.2014.49058>
- Mahrous, A., Genedy, M. A., & Kalliny, M. (2020). The impact of characteristics of intra-organizational environment on entrepreneurial marketing intensity and performance in Egypt. *Journal of Entrepreneurship in Emerging Economies*, 12(5), 621–642. <https://doi.org/10.1108/jeee-08-2019-0115>
- Malunga, M. J., Patrick, B. M., Thetsane, R. M., & Mokheithi, M. C. (2020). Demographic Factors Associated with Attitude of Youth Towards Agripreneurship. *International Journal of Business and Social Science*, 11(5). <https://doi.org/10.30845/ijbss.v11n5a6>
- Miniesy, R., & Fakhredin, H. (2023). The impact of entrepreneurs' perceptions and social media usage on their intention to formalise their MSMEs in Egypt. *Journal of Entrepreneurship and Public Policy*, 12(3/4), 209–233. <https://doi.org/10.1108/jep-04-2023-0037>
- Ministry of Planning and Economic Development (February 2024). Event of “Intilaaq” Company for Entrepreneurship. <https://mped.gov.eg/singlenews?id=5327>
- Mohammed, R, S, A., (2021). Students' Attitudes towards Entrepreneurship and Ways of Strengthening From Students' Point View (A Field Study at the Faculty of Agriculture, Benha University). *Annals of Agric. Sci., Moshtohor*, 59(4), 1123-1138. <https://2u.pw/Y3fJHHEv>
- Nasr-Allah, A., Gasparatos, A., Karanja, A., Dompheh, E. B., Murphy, S., Rossignoli, C. M., Phillips, M., & Charo-Karisa, H. (2020). Employment generation in the Egyptian aquaculture value chain: implications for meeting the Sustainable Development Goals (SDGs). *Aquaculture*, 520, 734940. <https://doi.org/10.1016/j.aquaculture.2020.734940>
- Novanda, R. R., Khaliqi, M., Jamil, A. S., & Bakhtiar, A. (2020). Factors affects agricultural entrepreneurial intention of agribusiness students. *IOP Conference Series Earth and Environmental Science*, 454(1), 012038. <https://doi.org/10.1088/1755-1315/454/1/012038>
- Nurlaela, S., Raya, A. B., & Hariadi, S. S. (2022). Information Technology Utilization Of Young Educated Farmers In Agricultural Entrepreneurship. *Agro Ekonomi*, 33(1), 11. <https://doi.org/10.22146/ae.64524>

- Saghaian, S., Mohammadi, H., & Mohammadi, M. (2022). Factors Affecting Success of Entrepreneurship in Agribusinesses: Evidence from the City of Mashhad, Iran. *Sustainability*, 14(13), 7700. <https://doi.org/10.3390/su14137700>
- Salem, A. S. A. (2023). Alexandria university students' awareness towards entrepreneurship as a step to achieve sustainable development and its impact on their entrepreneurial ambitions. *Journal of the Advances in Agricultural Researches*, 28(1), 46-60. DOI: 10.21608/JALEXU.2023.182479.1104
- Saputra, M. A., & Rahmawaty, A. (2023). The Role of Islamic Service Quality on Intention to Use Indonesian Islamic Bank: Trust as an Intervening Variable. *MALIA Journal of Islamic Banking and Finance*, 7(1), 13. <https://doi.org/10.21043/malia.v7i1.20547>
- Saraswati, A. E., & Setiyawati, H. (2021). Factors affecting the control of budget abuse. *Journal of Contemporary Accounting*, 3(2), 88–97. <https://doi.org/10.20885/jca.vol3.iss2.art4>
- Sontay, G., Yetim, H., Karamustafaoglu, S., & Karamustafaoglu, O. (2019). Developing an Entrepreneurship Scale for 5th Grade Students. *International Journal of Educational Methodology*, 5(2), 203–220. <https://doi.org/10.12973/ijem.5.2.203>
- Youssef, M. M. A. (2021). University youth attitudes towards entrepreneurship: A field study at the Faculty of Agriculture, Damanhour University. *Alexandria Science Exchange Journal*, 42(1), 1–31. <https://doi.org/10.21608/asejaiqjsae.2021.140936>
- Yunandar, D. T., Hariadi, S. S., & Raya, A. B. (2019b). Students' attitude towards agricultural entrepreneurship in selected vocational colleges in Indonesia. *Journal of Agricultural Extension*, 23(2), 147. <https://doi.org/10.4314/jae.v23i2.15>
- Zhang, Q., Liu, C., Wang, Z., & Yang, Z. (2020a). The College Students' Sense of Responsibility for Innovation and Entrepreneurship. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.02049>
- Zhang, Q., Liu, C., Wang, Z., & Yang, Z. (2020b). The College Students' Sense of Responsibility for Innovation and Entrepreneurship. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.02049>

## استكشاف اتجاهات طلاب كلية الزراعة بجامعة الإسكندرية نحو ريادة الأعمال الزراعية

محمد عبد النبي برجل<sup>١</sup>      تامر جمال إبراهيم منصور<sup>٢</sup>

<sup>١</sup> قسم التعليم الإرشادي الزراعي، كلية الزراعة، جامعة الإسكندرية، مصر.

<sup>٢</sup> قسم الاقتصاد الزراعي، معهد البحوث الزراعية والبيولوجية، المركز القومي للبحوث، الجيزة، مصر.

Email: [tamer\\_baz@yahoo.com](mailto:tamer_baz@yahoo.com)

تاريخ الإرسال: ٢٠٢٥/٢/١٩ م      تاريخ القبول: ٢٠٢٥/٣/٤ م      تاريخ النشر: ٢٠٢٥/٦/٣٠ م      الصفحات: ٢٩ - ١

### المستخلص

استهدف هذا البحث تحليل اتجاهات طلاب كلية الزراعة نحو ريادة الأعمال الزراعية، والعوامل المؤثرة في تشكيل تلك الاتجاهات. حيث أُجريت الدراسة بكلية الزراعة - جامعة الإسكندرية، واستهدفت عينة عشوائية مكونة من ٢٦٥ طالبًا وطالبة من طلاب الفرقتين الثالثة والرابعة في مختلف التخصصات الزراعية. وتم جمع البيانات باستخدام استمارة استبيان أُعدت لهذا الغرض، خلال الفصل الدراسي الثاني (أبريل ومايو) من عام ٢٠٢٤.

### أظهرت النتائج ما يلي:

أن ٦٢.٣% من العينة من الإناث، وأن ٨٠.٨% من الطلاب ينحدرون من مناطق حضرية. كما تبين أن ٤٥.٣% من آباء الطلاب يعملون في وظائف حكومية أو في القطاع الخاص. وأوضحت البيانات أن ٧٤.٣% من الطلاب لا يشاركون في الأنشطة الجامعية، بينما يعمل نحو ٤٠% في وظائف مؤقتة. وتراوحت أعمار غالبية الطلاب بين ٢١ و ٢٣ عامًا، وقد أظهرت مستويات مرتفعة من الكفاءة الذاتية والدعم الأسري. فيما يتعلق بريادة الأعمال، كشفت النتائج أن ٥٦.٢% من الطلاب يعتمدون على مصدر واحد أو مصدرين فقط للحصول على المعلومات، ما يعكس الحاجة إلى تنويع مصادر المعرفة. كما أظهرت الدراسة أن ٥١.٧% من الطلاب يمتلكون اتجاهات محايدة تجاه ريادة الأعمال الزراعية، في حين عبّر ٢٦% منهم عن اتجاهات سلبية.

وبناءً على هذه النتائج، توصي الدراسة بتعزيز البرامج التعليمية والتدريبية المتعلقة بريادة الأعمال الزراعية، وتشجيع التفاعل بين الطلاب والخريجين الرياديين، بهدف توسيع آفاقهم وفهمهم للتحديات والفرص المتاحة في هذا المجال.

**الكلمات المفتاحية:** ريادة الأعمال، النية الريادية، التنمية الاقتصادية المستدامة.