



Article

Attitudes of Al-Abbasi Agricultural Preparatory School Students Towards Agricultural Work

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Abstract: This study was conducted to learn the attitudes of students, who were engaged at Al-Abbasi Agricultural Secondary School, towards agricultural work, and to find out the relationship between this attitude and the characteristics of the students. The study population comprised all students in the agricultural department at Al-Hawija Agricultural Secondary School, including 192 male and female students. A 40% sample of the total population was randomly chosen; 77 respondents were retrieved. Two questionnaires were developed for data collection. The first part covered the personal characteristics of respondents such as the respondents' gender, their primary family income, type of land tenure, participation in agricultural work, and exposure to communication sources. The second portion included 20 statements to gauge students' attitudes towards agricultural work. To reach the objectives of the study, several statistical methods were used such as range, arithmetic mean, Pearson's correlation coefficient, and Spearman's correlation coefficient. The outcomes indicated that the attitudes of Al-Hawija Agricultural Secondary School students to agricultural work were positive and tending toward neutral. Results showed that there was a significant correlation between students' attitudes towards agricultural work and most of the factors that were studied. To formulate students' perspectives on agricultural work to contribute to its role as a significant sector of employment for rural youth, and to make the practical component of agricultural secondary school curricula more prominent, the researcher suggested that the agricultural sector in the study area receives governmental help. In the agricultural school context, the researcher believes the state should give the top agricultural secondary school graduates agricultural land plots, provide the necessary production requirements, and the focus should be on the practical dimension of agricultural secondary school student agricultural training to prepare them to enhance their skills in carrying out agricultural operations in the field. This study was conducted to learn the attitudes of students, who were engaged at Al-Abbasi Agricultural Secondary School, towards agricultural work, and to find out the relationship between this attitude and the characteristics of the students. The study population comprised all students in the agricultural department at Al-Hawija Agricultural Secondary School, including 192 male and female students. A 40% sample of the total population was randomly chosen; 77 respondents were retrieved. Two questionnaires were developed for data collection. The first part covered the personal characteristics of respondents such as the respondents' gender, their primary family income, type of land tenure, participation in agricultural work, and exposure to communication sources. The second portion included 20 statements to gauge students' attitudes towards agricultural work. To reach the objectives of the study, several statistical methods were used such as range, arithmetic mean, Pearson's correlation coefficient, and Spearman's correlation coefficient. The outcomes indicated that the attitudes of Al-Hawija Agricultural Secondary School students to agricultural work were positive and tending toward neutral. Results showed that there was a significant correlation between students' attitudes towards agricultural work and most of the factors that were studied. To formulate students' perspectives on agricultural work to contribute to its role as a significant sector of employment for rural youth, and to make the practical component of agricultural secondary school curricula more prominent, the researcher suggested that the

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agricultural sector in the study area receives governmental help. In the agricultural school context, the researcher believes the state should give the top agricultural secondary school graduates agricultural land plots, provide the necessary production requirements, and the focus should be on the practical dimension of agricultural secondary school student agricultural training to prepare them to enhance their skills in carrying out agricultural operations in the field.

Keywords: Students' attitudes; Agricultural work; Agricultural preparatory school; Rural youth; Agricultural extension sources; Land tenure; Agricultural education.

1. Introduction

An important element of agricultural growth is to secure food, diversify the economy and increase rural employment. The success of the agricultural development process relies on human resource inclusion—men, women, and rural youth who participate effectively in agricultural work (Abdel-Halim, 2022: 2). Agricultural work may be viewed as one of development's fundamental principles in developing countries more generally, and rural populations in particular especially, since it is a positive, active pursuit of societal welfare and development. This issue has been of foremost importance to international agricultural organizations who have considered the eradication of poverty and hunger to be the first of the Third Millennium Development Goals as all countries—including Iraq—try to secure food sources through the use of agricultural resources (Bekhait et al., 2023: 2). Agriculture is the primary economic driver of growing countries and one of the more common ways to eradicate hunger and poverty in a country (Baye, 2016). Agriculture remains one of the most commercially viable and profitable sectors in almost all countries of the globe (Adebayo, 2017: 77) and employment for many people, poverty eradication, food shortages eradication, and the development of a country's economy remain major contributions (Bamiro & Oyetoki, 2019: 101). Agriculture is crucial in providing food to the population, providing goods and services and community welfare, raising the standard of living in rural regions and conserving natural resources (Botsch and Gung, 2006: 98). Agriculture is a major economic activity in the majority of Arab countries, Iraq contained in the list and it comprises around 30% of the total workforce, so is a major source of livelihood for a high share of the population (Arab Organization for Agricultural Development, 2007: 44). The agricultural sector is one of the most meaningful contributions to the Iraqi national economy in the rural area, providing food and work for the population (Aboud, 2003: 12). As illustrated in the Rural Development Report (2019), over 50% of youth in developing countries, such as Iraq, live in rural areas where this group of young individuals demonstrates tremendous potential – investing in this section of the population has numerous benefits as it cuts the poverty rate, generates employment and assures food security. The report highlights that by 2030 these young men and women are the only channel by which sustainable rural development goals may be realized (International Fund for Agricultural Development, 2019: 6) [1], [2], [3], [4].

Since attitudes are part of a mechanism through which an individual organizes and makes sense of the world and in turn can facilitate adaptation to an environment and have a predictive effect on behavior, rational interpretation of an individual's behavior is based upon realistic understanding of their psychological and social dispositions. Attitude is referred to as the motivating force that induces behaviour and in turn channelizes it (Abu Jaber and Abdul Latif, 2000: 368). An individual's behaviour is influenced by multiple aspects such as: the person's skills and competencies to perform a certain behavior, the person's previous experience and the ease or difficulty of the behavior (Al-Khatib, 2000). Since attitude is one of the basic factors that determines an individual's behavior in a certain subject, and a student's behavior, in which they hold knowledge, skills and attitudes among them, is the axis of activity of education to give students the positive skills and to obtain knowledge and skill which will enhance their learning [5], [6], [7]. To determine the attitudes of the Al-Abbasi Agricultural Preparatory School students

towards agricultural work, we answered the following research questions to investigate the research problem:

1. What are the attitudes of Al-Abbasi Agricultural Preparatory School students towards agricultural work?
2. What is the correlation between the attitudes of Al-Abbasi Agricultural Preparatory School students towards agricultural work and each of the student-related factors represented by (sex, the family's main source of income, type of land tenure, participation in agricultural work, and contact with extension sources)?
3. What is the descending order of the research statements?

Research Objectives

1. To identify the attitudes of Al-Abbasi Agricultural Preparatory School students towards agricultural work.
2. To determine the correlation between the attitudes of Al-Abbasi Agricultural Preparatory School students towards agricultural work and each of the student-related factors represented by (sex, the family's main source of income, type of land tenure, participation in agricultural work, and contact with extension sources).
- 3- To rank the research statements in descending order.

Statistical Hypotheses

1-At Al-Abbasi Agricultural Preparatory School, students' views on agricultural work don't seem to be influenced by their gender.

2-Interestingly, the main source of a student's family income doesn't appear to affect how they feel about agricultural work at Al-Abbasi Agricultural Preparatory School.

3-It seems that the type of land ownership doesn't play a significant role in shaping students' attitudes toward agricultural work at Al-Abbasi Agricultural Preparatory School.

4-Even students who actively participate in agricultural work at Al-Abbasi Agricultural Preparatory School have attitudes that are not significantly different from those who don't participate.

5-Lastly, access to different sources of extension hasn't shown a notable impact on how students at Al-Abbasi Agricultural Preparatory School view agricultural work.

Operational Definitions

1-Attitude: The extent to which students of Al-Abbasi Agricultural Preparatory School are prepared to work in the field of agriculture and participate in agricultural activities.

2. Materials and Methods

Research Resources and Methods

Research Methodology

The descriptive approach to research was utilized to meet the research objectives; the objective was to provide a precise description of the subject under study, using scientific means, in which the results obtained by the researcher are converted into expressive numerical figures that can be interpreted accurately. It has one more advantage of delivering actual information, that in turn will aid in interpreting human and social realities [8], [9], [10], [11].

Research Area

The Al-Abbasi Agricultural Preparatory School in Al-Hawija District, Kirkuk Governorate, was chosen as the area for conducting the research, as agriculture is one of the main professions in the region, as there are vast areas of agricultural land, in addition to the availability of irrigation water and a suitable agricultural environment for growing most crops.

Research Population and Sample

The research population included all students of the agricultural department at Al-Abbasi Agricultural Preparatory School, totaling (192) male and female students, from whom a stratified random sample of 40% was selected, bringing the number of respondents to (77), as shown in Table (1).

Table (1): Research Population and Sample

No.	Stage	Population			Sample		
		Male	Female	Total	Male	Female	Total
1	First	35	7	42	14	3	17
2	Second	34	7	41	14	3	17
3	Third	91	18	109	36	7	43
	Total	160	32	192	64	13	77

Preparation of the Questionnaire

The questionnaire was formulated according to the needs of the study and included two sections:

Part One: A series of questions were used to ascertain the students' personal characteristics (sex, the family's main source of income, type of land tenure, participation in agricultural work, and contact with sources of extension) [12], [13], [14].

Part Two: The second part used a scale to determine the attitudes of Al-Abbasi Agricultural Preparatory School students in Hawija District concerning agricultural work, consisting of (20) statements, with the alternatives (agree, neutral, disagree) placed alongside each.

Measurement of Research Variables

Measurement of Independent Factors

1-Sex: Assessed in terms of the two alternatives (male, female) to which values (2, 1) were assigned.

2-Source of family income: Measured through the two alternatives (agricultural, non-agricultural). Values (2, 1) were placed, respectively.

3-Land tenure type: Assessed via the alternatives (owned, contracted, rented). Values (1, 2, 3) were assigned, respectively.

4-Working in agriculture: Assessed using the two alternatives (participant and non-participant), to which the corresponding values, (1, 0), were assigned.

5-Contact with extension sources: Indicated with (5) sources from which the respondent might obtain information about agriculture, with the alternatives (often, sometimes, never obtain) presented side by side, to which the values (3, 2, 1) were given, respectively. The numbers that indicate contact with the sources of extension are therefore between (5–15) [15], [16], [17], [18].

Measurement of Attitude

And In The attitudes of Al-Abbasi agricultural students regarding agricultural work were defined in (20) statements, 50% positive and 50% negative, with the options (agree, neutral, disagree) presented next to each. Positive items were given the values (3, 2, 1) and negative items were given the values (1, 2, 3). Values reflecting the students of Al-Abbasi Agricultural Preparatory School's attitudes on agricultural work are thus between (20–60) points [19].

Statistical Methods

Various statistical techniques were utilized to attain the research aims, such as:

1-Range: for splitting the independent variables into categories (Falifel and Hamdan, 2013: 25), using the formula:

Range = highest value – lowest value.

2- Class width: A way of approximating the range of classes, usually used to derive the class width: we divide the range by the number of classes (Zayed, 2008: 66) and have the formula:

Class width = Range / Number of classes (results rounded to the nearest whole number)

3- Frequency Distribution: A way to sum up and arrange any previously collected and classified data which is defined as the number of classes, which are divided into multiple groups known as a class (Karash et al., 2014: 23).

4- Arithmetic Mean: It is used to represent numerical values of the studied factors (Saleh, 2011: 59) with its formula:

$$\bar{x} = \sum xi / n.$$

Where: \bar{x} = arithmetic mean; $\sum xi$ = sum of the numerical values; n = number of respondents.

5- The effect of the Al-Abbasi Agricultural Preparatory School students' perspectives on agricultural work was measured by Spearman's Rank Correlation Coefficient (rs) to measure the relationship between the descriptive independent variables and Al-Abbasi Agricultural Preparatory School students' approach on agricultural work (Mohammed, 2007: 65) using the formula:

$$rs = 1 - [6\sum di^2 / n(n^2-1)]$$

Where: rs = Spearman's correlation coefficient; di^2 = the square of the differences between ranks; n = number of respondents.

6-Simple (Pearson) Correlation Coefficient: Used to determine the correlation between the attitude of Al-Abbasi Agricultural Preparatory School students towards agricultural work and each of the quantitative independent variables (Al-Baldawi, 2009: 193), using the following formula:

$$r = [n\sum xy - (\sum x)(\sum y)] / \sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}.$$

Where: r = correlation coefficient; xi = values of the independent variable; yi = values of the problem magnitude; n = number of respondents.

7-(t) Test: The test was carried out to discover whether there is any relationship between the attitude of Al-Abbasi Agricultural Preparatory School students towards agricultural work and each of the factors, when each of the independent variables was studied and compare the relationship with the determined (t) value (Al-Qurashi, 2007: 110), in the form:

$$t = r\sqrt{(n-2)} / \sqrt{(1-r^2)}.$$

Where: t = computed t-value; r = the correlation coefficient between the variables; n = number of respondents.

3. Results and Discussion

The results are presented and discussed according to the following research objectives:

First Objective: Identifying the Attitudes of Al-Abbasi Agricultural Preparatory School Students Towards Agricultural Work

The values expressing the attitudes of Al-Abbasi Agricultural Preparatory School students towards agricultural work ranged between (32–54). Respondents were divided into three categories using the range, and the results were as shown in Table (2).

Table (2): Distribution of Respondents According to Attitude Towards Agricultural Work

Category	Number	Percentage	Mean Score
Negative (32–39)	20	25.97	27.27
Neutral (40–47)	26	33.77	33.76
Positive (48–55)	31	40.26	38.96
Total	77	100	

Table (2) shows that the highest category was the positive category, at 40.26%, while the lowest was the negative-attitude category. Therefore, the attitude of Al-Abbasi Agricultural Preparatory School students towards agricultural work is described as positive, and the reason may be the students' awareness of the importance of agricultural work in the research area, which is considered one of the most suitable occupations for rural youth at this age.

Second Objective: Finding the Correlation Between Students' Attitudes Towards Agricultural Work and Respondent-Related Factors

1. Sex: Respondents were distributed according to sex into two categories, and the results were as shown in Table (3).

Table (3): Distribution of Respondents According to Sex

Category	Number	Percentage	Mean Score	rs value
Male	43	55.84	44.25	-0.08
Female	34	44.16	45.38	
Total	77	100		

Table (3) shows that more than half of the respondents were male, at 55.84%. Spearman's correlation coefficient was calculated to measure sex and attitude and it was calculated as (-0.08). The significance of the association of these two variables was checked by the (t) test and the computed (t) value was (0.69) which proved that the relationship between the two variables is considered non-significant. Based on this, we accept the statistical hypothesis stating there is no statistically significant association between Al-Abbasi Agricultural Preparatory School students in their attitude towards agricultural work, and sex.

2. The Family's Main Source of Income: Respondents were distributed according to the family's main source of income, as shown in Table (4).

Table (4): Distribution of Respondents According to the Family's Main Source of Income

Category	Number	Percentage	Mean Score	rs value
Agricultural	62	80.52	46.74	0.49**
Non-agricultural	15	19.48	37.16	
Total	77	100		

indicates that the relationship is significant at the (0.01) level.

The result (Table (4)) revealed that the majority of the respondents were in the agricultural-income category, at 80.52%. Spearman's correlation coefficient (0.49) was used to find the correlation between the family's main source of income and attitude. The (t) test for statistical significance was performed and was found to be (t) = 4.86, indicating that the correlation was statistically significant at the (0.01) level. Thus, we reject our statistical hypothesis stating that there is no statistically significant relationship between the attitude of Al-Abbasi Agricultural Preparatory School students towards agricultural work and the family's primary source of income. This could be attributed to the high dependence of the area on agriculture as a source of family income, which supports the respondents in feeling the importance of agricultural work and the increasing of production in order to improve the family's economic standard.

3. Type of Land Tenure: Respondents were distributed according to type of land tenure, as shown in Table (5).

Table (5): Distribution of Respondents According to Type of Land Tenure

Category	Number	Percentage	Mean Score	rs value
Owned	27	35.06	48.33	0.21*
Contracted	34	44.16	43.57	
Rented	16	20.78	42.16	

Total	77	100		
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indicates that the relationship is significant at the (0.05) level.

Table (5) indicates that the highest number of respondents were in the “contracted” category, with 44.16%. Spearman’s correlation coefficient was used, yielding a value of (0.21) to determine the correlation between type of land tenure and attitude. In order to verify the significance between the two variables, the (t) test was performed and the (t) obtained reached a value of (1.86) that is statistically significant at the (0.05) level. Therefore, we reject the hypothesis that no statistically significant correlation exists between the attitude of the Al-Abbasi Agricultural Preparatory School students towards agricultural work and the type of land tenure. These people who have their own land tend to cultivate it and engage in agricultural work more than others, as they don’t have to pay the additional production cost in the form of land rent or contract payments.

4. Participation in Agricultural Work: Respondents were distributed according to participation in agricultural work, as shown in Table (6).

Table (6): Distribution of Respondents According to Participation in Agricultural Work

Category	Number	Percentage	Mean Score	rs value
Participant	68	88.31	45.88	0.51**
Non-participant	9	11.69	35.00	
Total	77	100		

indicates that the relationship is significant at the (0.01) level.

Most of the respondents (88.31%; Table (6)) were in the “participant” category at agricultural work. In order to investigate the correlation of attitude and involvement in agricultural work, the Spearman's correlation coefficient, which is reported as (0.51), was employed. To evaluate the significance of association between the two variables, the t test was performed ($t = 5.16$), implying a statistically significant relationship between the two variables at the (0.01) level. Thus, we reject the statistical hypothesis stating that there is no statistically significant correlation between the attitude of Al-Abbasi Agricultural Preparatory School students towards agricultural work and participation in agricultural work. This could be because people involved in farm work understand how to tend crops with less effort and at lower cost.

Contact with Extension Sources: The values expressing contact with extension sources ranged between (5–13). Respondents were divided into three categories using the range, and the results were as shown in Table (7).

Table (7): Distribution of Respondents According to Contact with Extension Sources

Category	Number	Percentage	Mean Score	rs value
Low (5–7)	26	33.77	42.08	0.57**
Medium (8–10)	31	40.26	43.81	
High (11–13)	20	25.97	51.83	
Total	77	100		

indicates that the relationship is significant at the (0.01) level.

In Table (7), the largest number of respondents were in the “medium” category, with 40.26%. To determine the correlation between contact with extension sources and attitude, Spearman's correlation coefficient was used, and its value was (0.57). To test the

significance of the relationship between the two variables, the (t) test was used, and the calculated (t) value was (6.03), indicating a statistically significant correlation at the (0.01) level. We therefore reject the statistical hypothesis stating there is no statistically significant correlation between the attitude of Al-Abbasi Agricultural Preparatory School students towards agricultural work and contact with extension sources. The reason may be that having more extension sources allows respondents to learn about crop-tending operations, methods of application, and their importance for increasing productivity.

Third Objective: Ranking the Research Statements in Descending Order

The research statements were ranked in descending order according to the arithmetic mean, and the results were as shown in Table (8).

Table (8): Ranking of the Research Statements in Descending Order

No.	Statement	Mean	Rank
1	I believe that agricultural work secures the family's livelihood	2.85	1
2	I believe that farm work is an occupation that cannot be dispensed with in rural areas	2.65	2.5
3	I believe that agriculture keeps the air clean in rural areas	2.65	2.5
4	I think that agricultural work involves great risks	2.55	4
5	I feel that farm work is important for achieving the country's food security	2.50	5
6	I feel that farm work is a waste of time	2.45	6
7	I believe that agricultural work provides employment opportunities for rural youth	2.40	7
8	I feel that farm work does not require special scientific qualifications	2.35	8
9	I feel that agricultural work does not fulfill my aspirations	2.30	9.5
10	I believe that growing crops helps purify the air of dust	2.30	9.5
11	I feel comfortable working on the farm	2.25	11.5
12	I believe that the income from farm work does not cover production costs	2.25	11.5
13	I feel that agricultural work is boring work	2.20	13
14	I believe that farm work provides me with a steady income throughout the year	2.15	15
15	I feel that agricultural crops are exposed to the risks of weather conditions	2.15	15
16	I think that farm work does not require high-cost techniques	2.15	15
17	I believe that controlling agricultural pests exposes me to risks	2.05	17
18	I think that agricultural work exposes me to harsh environmental conditions	1.95	18.5

19	I believe that farm work requires working throughout the year	1.95	18.5
20	I believe that disposing of crop residue requires great effort	1.80	20

Maximum possible value = 3

Table (8) indicates that the statement (“I believe that agricultural work secures the family’s livelihood”) ranked first with a mean of (2.85). The reason could be the importance of agricultural work in securing the family’s needs for field crops and vegetables in rural areas, without having to rely on purchasing them from local markets. On the other hand, the statement (“I believe that disposing of crop residue requires great effort”) ranked last, likely because crop residue is used for grazing livestock or collected by people who need it as fodder for their animals or as firewood, which reduces the effort required of the farmer to dispose of it.

4. Conclusion

1-Analysis showed in the survey responses that the majority of the respondents were in the positive category and the neutral category was the next largest. From this, we draw the conclusion about the state support for the agricultural sector to develop the attitude of rural youths towards agricultural work as a form of primary livelihood for rural youth.

2-The attitude towards agricultural work was highest among landowners. We conclude from this the need to support agricultural preparatory school graduates and provide agricultural land plots for them to be able to practice their agricultural activity without adding cost to production expenses through paying contract or rental fees.

3-The findings demonstrated a statistically significant correlation between students’ attitude towards agricultural work and their participation in it. We thus take away from this the importance of the practical aspect in agricultural preparatory school curricula regarding agricultural operations and of student practice in the application of agricultural techniques in the field.

4-The results showed a statistically significant correlation between students’ attitude towards agricultural work and extension sources. From this we conclude the necessity of concentrating on the diversification of students’ sources of extension regarding agricultural work, and thus provide them with all new farming practices that they can use in their own work area.

5-The results showed that the statement (“I believe that agricultural work secures the family’s livelihood”) ranked first. Hereafter, we conclude the significance of agricultural work being one of the primary occupations of rural youth as it secures family livelihood, as well as a significant source of income for the farm family.

Recommendations

1-The state should support agricultural preparatory school graduates by giving them plots of agricultural land and providing them with production requirements, which help them in contributing to building the national economy and increasing domestic output to ensure the country’s food security.

2-The applied part should be concentrated on training agricultural preparatory students in order to practice agricultural operations across all curricula, under the supervision of specialized instructors, to increase their skills in applying agricultural operations in the field.

3-Increase students’ information regarding agricultural techniques and their importance for agricultural work and encourage them to take part in the extension activities carried out by the extension service in their research area.

4-Provision of production requirements by the agricultural supplies company at prices subsidized by the state, to increase farmers’ opportunities to achieve worthwhile profits from agricultural work and encourage them to remain on the land rather than migrate to the city in search of job opportunities that secure sufficient family income.

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Authors' Contributions

In this study, authors contributed equally to the study.

Conflicts Of Interest

No conflict of interest was declared by the authors.

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