

Determinants of disseminating agricultural techniques through social networking sites from the point of view of agricultural extension workers in Salah al-Din Governorate|

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Abstract

The aim of the research is to identify the determinants of disseminating agricultural techniques through social networking sites from the point of view of agricultural extension workers in Salah al-Din Governorate, which are represented by (determinants related to the agricultural extension system, determinants related to farmers, determinants related to agricultural technology), and to identify the extent of the conflict in the opinions of agricultural extension workers. Employees in the directorate. Agriculture and its people according to some personal characteristics Governorate in (age, gender, educational attainment, number of years of extension service, participation in the field of disseminating agricultural techniques, sources of obtaining information about disseminating agricultural techniques, trend towards modern technologies, trend towards social networking sites, as well as ranking of fields The research was descended according to the size of the determinants, and the research included all agricultural extension workers working in agricultural extension, namely (plant production, animal production, prevention, agricultural extension). Their number is (315) agricultural extension workers affiliated with 26 agricultural departments, in addition to the employees of the governorate's agriculture directorate. 50% of the agricultural departments, thus the number of departments subject to the research procedures became 13 agricultural departments with (212) employees. A survey sample of the size of (30) employees was conducted in the Directorate of Agriculture, and thus the number of employees subject to the research procedure became (212) respondents. . 50 %It was taken quickly of them. Thus, the number of employees subject to the study procedures became A random, proportional sample of 50% was selected from them (110) respondents respondents. A questionnaire form consisting of two parts was prepared, the first part of which included the personal and functional variables of the extension workers. The second part included (43) paragraphs representing the determinants of disseminating agricultural techniques through social networking sites. From the point of view of agricultural extension workers in Salah al-Din Governorate, it is divided into three areas: determinants related to farmers, determinants related to agricultural technology). A three-level scale was placed in front of the items (large, medium, and small). After ensuring the content validity and face validity of the questionnaire, the reliability coefficient was found using Cronbach's alpha.

The research data was collected and analyzed using a number of statistical methods, the most important of which are (range, frequency distribution, analysis of variance). The results showed that the determinants facing agricultural extension workers are moderate and tend to be high. We conclude from this that the determinants facing agricultural extension agents in the process of disseminating agricultural technologies through social networking sites are large. The results also showed that the determinants related to agricultural technology ranked first, followed by the rest of

the determinants, and all of these Problems and limitations lead to an obstacle for agricultural extension workers in the process of disseminating agricultural techniques through social networking sites. The researchers recommended solving these problems and supporting agricultural extension workers and providing assistance to them to enable them to disseminate agricultural techniques through social networking sites.

Contribution and research problem

The system of agriculture is still widely demographic and active in the social and economic sphere (1). Agriculture is the engine of bad and beneficial growth and the most effective way to alleviate suffering and poverty in the world (2). Given the importance of the agricultural sector, many important organizations that contribute to agriculture and the rural population have increased, including agricultural extension, which remains one of the most important organizations that contribute to Promoting agriculture and improving the population level (3).

Information technologies and the invention of one of the solutions to this global technology, which has long begun to improve agricultural processes in specifically affected countries. There is generally a consensus among the international community that knowledge exchange between people and communities based on new technological information will play a major role in achieving agricultural and solidarity development (4).

Medical technologies have appeared to be the important and basic means of solving the agricultural problem. In many areas, the choice is not for agricultural work, which is done through traditional means that rely on the method of experimentation. This means that the presence of these details is essential for agricultural problems. While the solution seems simple, it is not so in practice, even if the quantity is available. They may not be specific to specific agricultural areas, or they may not be easily transferred, or they may

conflict with ancient and cultural processes (5).

The social networking sites YouTube and Facebook are the most used for this, as they need agricultural employees to work on developing the content that is published through them (6).

Social networking sites have become popular on mobile networks, disseminating information almost anywhere, making educational materials available on mobile phone which constitutes agricultural extension work (7). It is eaten fresh, along with fresh new vegetables (8).

Because it relies on the agricultural extension worker to be responsible for using the main communication channels, it must make a good effort in the agricultural extension methods that are the focus of its work (9). Since the various cinematic influences at the My Practical Festival directly contribute to the success of its efforts and implementation, they were prepared on the agricultural extension system and learned about the features and specifications of the available extension methods so that they could choose and choose from the different ones. Saving time, effort, and money (10). Social networking sites are considered an effective means of transmitting information around the world and are called famous agricultural extension sites. Therefore, Facebook and YouTube are a very unpopular part of human daily life to entertain private sector and public sector partners. These sites fall into different marketing fields (11), and interest in adding these agricultural commercial sites is increasing (12).

Note: Hopefully they will start editing their social media posts. Therefore, this research aims to know the determinants of disseminating agricultural elements through social networking sites from the point of view of agricultural extension workers in Salah Governorate. The idea of religion came to answer the following research questions:

- 1- What are the determinants of the volume of agricultural publishing via social media sites from the point of view of agricultural extension workers in Salah al-Din Governorate?
- 3- What is the deadline for research fields?
- 4- Is there a discrepancy in the determinants of disseminating specialized details via social media sites from the point of view of agricultural extension workers in Salah al-Din Governorate, according to their extended personal characteristics in terms of (the number of years of extension service), gender sources, obtaining information about disseminating more agricultural products, The trend towards... social networking sites)?

research aims:

- 1- Identifying the determinants of the volume of agricultural publishing through social networking sites from the point of view of agricultural extension workers in Salah al-Din Governorate.
- 2- Arrange the search terms in descending order.
- 4- Determining the discrepancy in the determinants of publishing agricultural details through social networking sites from the point of view of agricultural extension workers in Salah al-Din Governorate, according to their extended personal characteristics in (the number of years of extension service, national sources, obtaining information about

publishing more agricultural specializations, the trend towards sites Social Media).

Statistical hypotheses:

Layer assumptions based on the stable factors studied as follows:

- 1- There are no statistically significant differences between the averages of the determinants of disseminating agricultural amendments through social networking sites from the point of view of agricultural extension workers in Salah al-Din Governorate in cooperation with years of extension service.
- 2- There are no statistically significant differences between the averages of the determinants of publishing agricultural amendments via social networking sites from the point of view of agricultural extension workers in Salah al-Din Governorate, according to gender.
- 3- There are no statistically significant differences between the averages of the determinants of disseminating more features on social networking sites from the point of view of agricultural extension workers in Salah al-Din Governorate according to sources and obtaining information about disseminating agricultural elements.
- 4- There are no statistically significant differences between the averages of the determinants of publishing more additions on social networking sites from the point of view of agricultural extension workers in Salah al-Din Governorate, according to what supports the trend of social networking sites.

Procedural definitions

Modern subsection: The outputs of scientific research, whether material or cognitive, contribute to improving production quantitatively and qualitatively and are represented by agricultural innovations or ideas.

Exclusive bulletins: They are all that is limited to disseminating agricultural controls among agriculture, whether specific, material or cognitive, from the point of view of agricultural extension workers, through social networking sites.

Social networking sites: Social networking sites are used to reserve exclusive news, knowledge, and messages between people via the Internet, such as WhatsApp, Facebook, YouTube, and others.

Agricultural extension workers: All employees who work in the field of agricultural extension in the Salah al-Din Agriculture Directorate and its affiliated divisions and to whom their provisions apply.

Materials and methods of work

- Especially search:

In the study of this research, we relied on descriptive lessons to achieve the research objectives, for the sake of description

The intended topic, in addition to an accurate description of the reasonable method that is considered correct, is reserved for converting the data that reaches researchers into the form of preferable numbers that are preferable to being interpreted accurately, and one of its advantages also is that it produces real information that helps in interpreting human and social phenomena, according to (13).quoted from (14).

- Search Region:

Salah al-Din Governorate is located in central Iraq, north of the capital, Baghdad. It is an area for conducting research, as it includes all the issues and aspects that include maintaining its current administrative borders. There is no research in identifying the obstacles to spreading agriculture through continuous social media, according to the researchers' knowledge.

- Research population and sample:

The research community is present in all the elements or individuals related to the problem of the study and whose results are known to help them (15). The research community also included all agricultural extension workers in the agricultural administration and divisions affiliated with the Directorate of Agriculture of Salah al-Din Governorate, and their number is (315)* workers in agricultural extension. And agricultural employees distributed across agriculture (26) agricultural divisions, in addition to the center of the Discounts Directorate. It was chosen that a percentage of (50%) of the agricultural divisions changed in a way, and the number of divisions included in the study became (13) agricultural divisions, and the number of agricultural extension workers from the research community was (212) advisors. Agricultural, where the research began (110) respondents, and it was taken from outside the Al Ain research community, which later became (30) respondents, as proven in Table No. - 1-.

Table No. (1) Population and research sample

No.	Names of ramify research community agricultural		The research sample
1	Agriculture Directorate Center	70	30 exploratory samples
2	Left Coast Agriculture Division	14	7
3	Toast Agriculture Division	31	16
4	Baiji Agriculture Division	14	7
5	Dujail Agriculture Division	27	14
6	Tulul Albag Agriculture Division	15	8
7	Samarra Agriculture Division	21	11
8	Sharqat Agriculture Division	13	7
9	Aldor Agriculture Division	18	9
10	Science Agriculture Division	17	9
11	Tikrit Agriculture Division	13	7
12	Hamrin Agriculture Division	10	5
13	Balad Agriculture Division	14	7
14	Green Plain Agriculture Division	5	3
	Total	212	110

-Questionnaire form settings:

In order to achieve Ames or Objective, it seeks to search for multiple sources in order to be the first to use the research tool, and statement tools were used, which are among the important tools to achieve accurate information about the circumstances and reality (16). After reviewing previous studies, literature and personal interviews with no research related to the current research, the questionnaire form was designed and may And it was divided into two parts as well :

The first part: It included a number of questions to obtain data related to the strategic variables related to the respondents, including the following (number of years of extension service, gender, sources of obtaining information about disseminating agricultural

products, and trend toward social networking sites).

Part Two: By relying on the researcher to search for new sources and in light of a review of literature and sources

And studies related to the subject of the studies, the opinions of a group of experts and specialists through interviews with them, a preliminary scale was prepared, specialists (3) all fields that include every number of specialists in the field of health care, dissemination of agricultural advice through social networking sites from the point of view of agricultural extension workers in Saladin Governorate. Where (43) were prepared, they represent the determinants of distinct jobs through social networking sites, distributed over three periods as in Table -2.-

Table (2) Distribution of final paragraphs according to research paragraphs

No.	the field	Number of paragraphs
1	Determinants related to the guidance device	16
2	Farming-related determinants	14
3	Determinants related to agricultural technology	13
	Total	43

. Stability measurement:

Hypo-reliability is the ideal level of scores achieved on the measurement tool over time (the stability of the results in relation to if the measurement is repeated on the same group of individuals after a period of time). The stability of the tool means that the tool is reliable as well as that it can be relied upon in collecting data(17). Proving the tool also means that the tool is found to be the same if it is used by the same people under the same circumstances (18), and the stability is considered satisfactory, so silence is more than (0.79%) and is confirmed acceptable (19).

After reaching the degree of proof of the Alpha Cronbach agreement, which is one of the regional regions, the value of the Alpha Cronbach agreement reached (0.88), then the result of the signing agreement was completed with the proof root and the value of the contracting agreement reached (0.93), which is an agreement of agreements accepted in a scientific and restrictive manner. For research work and thus starting the ready-made form I decided to specify the data.

- Measuring developments:

1- Number of years of extension service: It was measured by the research question about the number of years of service in agricultural extension work

2- Gender: It was measured through the alternatives (male, female) and female values were given (1, 2) respectively.

3- Sources for obtaining information about the dissemination of agricultural accessories were measured according to the following alternatives (always, you have, rarely, you do not get) and the following values were given to the toilet (3, 2, 1, 0)

4- Error towards social networking sites: The scale consists of (8) statements (4 of which were positive and (4) of which were bad. In front of each of them are alternatives (agree, good, disagree) that have the following values (3, 2, 1). respectively for positive statements, and (1,2,3) were given respectively for negative statements.

- Measuring the Dependent Factor

The size of the determinants of disseminating agricultural elements through social networking sites was measured from the point of view of agricultural extension workers in the Directorate of Agriculture and its divisions through (43) items distributed among the research areas, and in front of each of them were alternatives (large, medium, easy). Values were given (3, 2, 1)directly through the application, limit the values that express the size of the test (43 - 129) numerical values.

11. Statistical methods: The analysis was analyzed using the statistical analysis program (SPSS) for the social sciences and the following statistical methods:

1- Scope: To divide some sources into according to the following law:-

Highest value – lowest value range

2- Frequency distribution: It is a summation and arrangement of data that has previously been collected and classified, divided into a number of groups, each of which is called a category. The categories may be classified in ascending or descending order depending on the nature of the data (20).

3- Percentage weight = arithmetic mean/ maximum score x 100

4- Analysis of variance.

Results and discussion

The following research results were discussed:

The first Ames: to identify the determinants of the extent of agricultural dissemination of

social communication methods from the point of view of agricultural extension workers in Salah al-Din Governorate.

The expressive values specified for the dissemination of agricultural elements through social networking sites from the point of view of agricultural extension workers in Salah al-Din Governorate were limited to between (66-126), With Averagee

(97.06) and the deviation of rejection to defense (12.877), the two versions were drawn into three copies, where the results are as In Table-3-.

Table-3 - shows the new bulletin according to the determinants of publishing agricultural details

No.	Categories	the number	Percentage	arithmetic average
1	(66 - 85) Low	23	20.90	78.6
2	Intermediate(86 - 105)	59	53.64	96.98
3	High (106-plus)	28	25.46	112.39
	Total	110	100%	

It is clear from Table 3 that more than half of the number of researchers fall into the middle class (96.98) to the middle Category (112.39), and thus the specific level of publishing agricultural applications on social networking sites is described as average and the reason may be the lack of entry of employees Agriculturalists in a training course in the field of disseminating details, as well as the lack of financial support, the small scale of

disseminating details among agriculture, in addition to the import of non-small agricultural techniques.

The second goal: Arrange the search fields in descending order.

The research periods were arranged in descending order according to the percentage weight of each field from the respondents' point of view regarding the results, as in Table 4.

Table -4 - Arrange the search areas in descending order

The field	arithmetical average	Maximum value	Percentage weight	Rank
Determinants related to agricultural technology	30.40	39	77.94	1
Determinants related to the guidance device	35.85	48	74.68	2

Farming-related determinants	30.81	42	73.35	3
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It is clear from Table 4 that the determinants of publishing elements related to neglected technology appear for the first time, and the reason behind the clarity of some of the proposals published in great detail on the Internet or the knowledge of the non-operation and use of some publications on social media sites may not be apparent.

The third objective: Determine the variation in the determinants of publishing agricultural details through social networking sites from the point of view of agricultural extension

Table -5 - shows the results of the analysis according to difference and year of extension service

Service categories	The number	percentage	arithmetic average	Value F	Probability value	Service categories
Short (1-8) years	51	46.37	98.02	0.701	0.356	Unsignificant
Medium (9-16) years	45	40.91	95.82			
Long (17 and over) years	14	12.72	97.57			
Total	110	100				

It can be seen from Table 5 that ($p > 0.05$) where the total is (0.356). Therefore, the statistical hypothesis is considered to be based on (there are no statistically significant differences between the averages of the determinants of agricultural dissemination through social networking sites from the point of view of agricultural extension workers in) Salah al-Din Governorate, according to the extension service.

workers in Salah al-Din Governorate, according to their personal characteristics extending to:

1. Number of years of extension service:

The values expressing the service of employees between (1 - 26) years were limited. They were distributed according to the range to thirty, and to know the significance of the differences in the means of these categories, a one-way analysis of variance was used for the results as in Table - 5-.

2.Gender:

The research results were distributed according to gender into two categories, as listed in Table - - The average rating was obtained from females, and the significance of the differences between the averages of the male and female categories was not tested, and the (t) test was used as in Table - 6

Table - 6 - shows the test results by gender

sex	The number	percentage	arithmetic average	Value T	Probability value	Statistical significance
male	93	84.54	99.69			

Female	17	15.46	82.71	5.689	0.000	Significant
total	110	100				

It is clear from Table 6 that the value ($p.v < 0.05$). Therefore, we reject the hypothesis of the statistician responsible for the determination (there are no statistically significant differences between the averages of the determinants of spreading privacy through social networking sites from the point of view of agricultural extension workers in Salah al-Din Governorate, according to sex).

There are no statistically significant differences between the averages of the determinants of publishing special amendments via social networking sites from the point of view of agricultural extension workers in Salah al-Din Governorate, according to contribution and gender.

In favor of the male category, the reason may be that employees are assigned more extension duties than females, which makes them try some designs only through social networking

sites to reach the largest number of farmers and reduce time and effort, which makes them affect the difficulties they face in spreading more space through social networking sites. More than females.

3. Sources for obtaining information about publishing agricultural supplements:

The values expressing the level of research connection to information sources were limited to between (8-22). They were divided into three and participated to express their point of view on the determinants of publishing privacy information through social networking sites in Salah al-Din Governorate. He succeeded in the first category (low) and obtained the highest average. Between categories and to test the significance of the differences between the categories, the analysis of variance was used for the results as in Table - 7 –

Table - 7 - shows the analysis of variance according to the sources of information

No	Categories	The number	percentage	arithmetic average	Value F	Probability value	Statistical significance
1	Low (1–12)	22	20	104.09	8.535	0.000	Significant
2	Average (13–17)	36	32.73	99.61			
3	High (18–22)	52	47.27	92.33			
	Total	110					

It is clear from Table 7 that ($p.v = 0.000$). Therefore, we reject the statistical hypothesis that states (there are no statistically significant differences between the averages of the determinants of disseminating agricultural techniques through social networking sites from the point of view of agricultural

extension workers in Salah al-Din Governorate according to categories Sources for obtaining information about the dissemination of agricultural technologies. To find out the source of the variance, I used the LSD test. The results were as shown in Table 8.

Table - 8 - shows the results of the LSD test according to the categories of communication sources

Category	Difference in averages	Probability value	Moral
Low: average	4.480	0.173	Insignificant
Low: high	11.764	0.000	Significant
Medium: high	7.284	0.006	Significant

Average attendance Table - 8 - The source of the discrepancy is the difference in the simple and medium communication category, the high communication category, and the high communication category. This may be due to the fact that the respondents who access more sources on social networking sites have gone beyond the use of indicative precedence with various special technologies and are confronted with modern and possible Publish it via social media sites.

4- Orientation to social networking sites:

The values that express the direction of research towards social networking sites were

limited to between (8 - 22). They were divided into three groups to explain their point of view, as certain individuals published agricultural concerns through social networking sites in Salah al-Din Governorate, and they obtained the first category (negative) and obtained a The peak is an average between the categories. To test the significance of the differences between the averages of the categories, an analysis of variance was used for the results, as in Table 9.

Table-9 - Results of the variance analysis according to interpretation towards social networking sites

Category	The number	percentage	average	value F	Probability value	Statistical significance
Negative (8-12)	23	20.91	108.17	0.000	31.019	Insignificant
Neutral (13 - 17)	36	32.73	101.17			
Positive (18 -22)	51	46.36	89.16			
Total	110	100				

It is clear from Table - 9 - that (0.000 = p.v.) Therefore, we reject the statistical hypothesis that exists on (There are no statistically significant differences between the averages of

the deletion determinants determined through social networking sites from the point of view of agricultural extension workers in Salah al-Din Governorate according to the project

towards social networking sites), and knowing the source of the variance tested

(LSD) displays the results as shown in Table - 10-.

Table - 10 - shows the results of the LSD test as supported by social media sites

Category	Difference in averages	Probability value	Moral
Negative: neutral	7.007	0.013	Moral
Negative positive	19.017	0.000	Moral
Neutral: positive	12.010	0.000	Moral

It is clear from Table 10 that the distinction is the difference between the average categories (negative: positive), (negative: positive), and (useful: positive). The reason may be that employees have a positive attitude towards social networking sites and know their importance in disseminating them. Among the largest number of modern farmers in a short time, which makes them learn how to use social networking sites and overcome many of the modern restrictions that are involved in their extension work in sharing agricultural details through these sites.

Conclusions:

1- Participation in the results that the majority of the respondents had experience from the intermediate courses of participation. We share this increase in the large amount of evidence undertaken by agricultural extension workers in disseminating business on social networking sites in Salah al-Din Governorate.
2- The results appear that the determinants of dissemination of considerations related to technology were neglected. It was highlighted first. The reason for the need for some amounts for field clarification on their application may be the inability of communication sites to clarify some concentrations, which makes farmers ignorant

of its application and does not accept it, which causes difficulty in disseminating it among agriculture.

3- The emergence of results that mentors in male operations have more determinants than females. Victor, spreading agricultural influences on social networking sites. We share this in assigning mentors in male operations to spread more influences than females, which makes them have more determinants than females.

4- The results appear that the guides who turn to social networking sites realize their importance in modern speed, spreading modern concepts among the largest number of agriculture in a short time. We will not differ from the one whose search for pluralism has many goals that will not become their extension work in spreading a few. Cultivation by these new new images who have a negative trend.

Recommendations:

1- Working to solve the problems facing agricultural extension workers in order to facilitate their work in the field of disseminating more social media.
2- Paying attention to the information provided about agricultural technology and providing access to information related to

technology in a clear and accurate manner in order to build its dissemination among agriculture.

3- Training male agricultural extension workers in the field of conveying various details on social media sites and providing the necessary equipment to prepare the expected extension activity on social media sites.

4- Explaining the importance of disseminating agricultural elements on social networking sites for agricultural extension workers, creating the positives, and explaining the effectiveness of their rapid spread and reducing time and cost.

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