THE EFFECT OF DISCUSSION IN THE DEVELOPMENT OF THE KNOWLEDGE LEVEL OF RURAL WOMAN TO BREEDING THE QUAIL'S BIRDS AT CAGES FOR THE ALBITAR REGION - WASIT PROVINCE

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ABSTRACT

The research was aimed to identify the impact of the discussion method in developing the level of knowledge of rural women to breeding the quail's birds at cages in the area of Al-Battar, Wasit Province. The Completely Randomized Design (CRD) with equivalent groups was used in a randomly selected sample of 32 female farmers out of 85 farmers. The sample was divided into two groups in a simple random manner with 16 female farmers per group (experimental group and control group) and adopted the method of analysis of statistical variance of second type. According to the following non-experimental variables, the equivalent of the two research groups are: the age of the female farmers, the level of education, the desire for indicative education. Two research tools were prepared, the first is a questionnaire for non-experimental variables, and the second is a test of the cognitive development of the female farmers in the field of raising the quail bird (Salwa or Frei) according to the first three levels of Bloom's classification of the cognitive dimension: memory, understanding and application. The test consists of a paragraph of a multiple choice type [27]. The researcher reached to the following results:

1. The post-test was excelled on the pre-test in developing the knowledge level of the female farmers of both groups (experimental and control).

2. The experimental group that used the method of discussion as an indicative method is excelled on the control group (lecture group) in the cognitive development of the female farmers.

The researcher recommended using of the indicative methods, especially the method of discussion to promote the educational indicative work to enable rural women to adopt and apply modern technologies in the process of agricultural production (both plant and animal).

Keywords: Experimental Group, quail's birds, Knowledge Development, indicative Learning.

أثر المناقشة في تطوير المستوى المعرفي للمرأة الريفية لتربية طير السمان بالاقفاص في منطقة البتار ـ محافظة واسط
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الملخص:
استهدف البحث التعرف على اثر طريقة المناقشة في تطوير المستوى المعرفي للمراة الريفية لتربية طير السمان (الفري) بالاقفاص في منطقة البتار – محافظة واسط. استخدم في البحث تصميم تام التعشية ذي المجموعات المتكافئة (CRD) Completely Randomized Design على عينة اختيرت عشوائياً بلغت (32) مزارعة من اصل (85) مزارعة، وقسمت العينة الى مجموعتين بالاسلوب العشوائي البسيط وبواقع (16) مزارعة لكل مجموعة (مجموعة تجريبية واخرى ضابطة)، واعتمد اسلوب تحليل التباين الاحصائي من النوع الثاني. وتبعاً للمتغيرات غير التجريبية الاتية تمت عملية تكافؤ مجموعتي البحث: عمر المبحوثات ، المستوى التعليمي ، الرغبة في التعلم الارشادي. تم اعداد اداتين للبحث، الاولى استمارة استبيان خاصة بالمتغيرات غير التجريبية، والثانية اختبار التطوير المعرفي للمبحوثات في مجال تربية طير السمان بالاقفاص (السلوى او الفري) وفق المستويات الثلاث الاولى لتصنيف بلوم للبعد المعرفي وهي : التذكر، الفهم والتطبيق، ويتكون الاختبار من (27) فقرة من نوع الاختيار من متعدد. توصل الباحث الى النتائج الاتية :

1. تفوق الاختبار البعدي على الاختبار القبلي في تطوير مستوى معرفة المبحوثات لكل من المجموعتين (التجريبية والضابطة).

2. تفوق المجموعة التجريبية التي استخدمت فيها طريقة المناقشة كطريقة ارشادية على المجموعة الضابطة (مجموعة المحاضرة) في التطوير المعرفي للمبحوثات.

اوصى الباحث باستخدام الطرائق الارشادية وبالاخص طريقة المناقشة لتعزيز العمل التعليمي الارشادي وذلك لتمكين المراة الريفية بتبني وتطبيق التقانات الحديثة في عملية الانتاج الزراعي بشقيه النباتي والحيواني.

الكلمات المفتاحية: المجموعة التجريبية، السلوى، التطوير المعرفي، التعلم الارشادي.

1. INTRODUCTION

Rural women make up more than half of the human unit and labor force in the rural community, especially the place of research (Al-Battar region). Rural women generally occupy the position of the mother who breeding and cares for the generations, caring the Rural family that is a basic unit in the society. In addition, rural women contribute effectively to agricultural production (plant and animal), Making them the main determinants of economic growth and thus the overall development of the country. It is worth mentioning that rural development cannot be achieved without the active participation of rural women. Therefore, necessary measures must be taken to encourage economic activity and establish projects that contribute to increasing the family income and improving their living conditions. As well as that these projects can be implemented in the vicinity of her home so close to her family and children, facilitate the reconciliation between domestic work and the management of the productive project [1], from these projects, breeding the quail's birds (Frei) using the technique of breeding cages due to the advantage of this method it does not occupy a large space of the area and can be placed in any corner or place of the house Possible control over all aspects of breeding, with the little effort and time from his face, and on the other hand, due its high economic benefit achieved to the family. It is worth mentioning that the quail bird has been mentioned in the Koran three times as "Salwa", as the meat and eggs of this bird have a very high nutritional and health value, and the Chinese have used the eggs of this bird for thousands of years to treat (asthma, rhinitis and spastic cough) It has been used in the treatment of skin diseases such as eczema, psoriasis, allergies, strengthens the immune system and memory, increases brain activity and also helps in the treatment of anemia by increasing hemoglobin and supplying the prostate with phosphorus, protein and vitamins [2]. The cost of breeding this bird is very simple and its food representation is high and in return high productivity and sold at good prices and attractive, The higher the food and health awareness of the citizens, the greater the demand for its production (the quail bird) from its eggs and meat. Therefore, it is possible that agricultural extension will play an active role in breeding awareness and encouraging rural women to adopt the technique of raising quail birds and providing them with the necessary knowledge and skills to that, Through the means and methods of guidance [3], especially the method of discussion - Because it has the advantage of creating a suitable for the transfer of ideas and information in the simplest form and image, and includes simple answers serialized questions that revolve in the minds of learners and broaden the horizons of their ideas, and be effective communication between the sender and the future and see the immediate and direct feedback, that the efficiency of this method achieve the desired goal of the fullest picture and successful and shorten the time and effort and cost is possible [4], The research problem is summarized as follows:
(What is the effect of using the method of discussion in developing the knowledge level of rural women to breeding the quail bird in the Al-Battar region - Wasit province?).

The aim of research:

The research aims at identifying the effect of the method of discussion in developing the cognitive level of the female farmers to breeding the quail bird in the cage at the Al-Battar region - Wasit region.

Research Hypothesis:

In order to achieve the research objective, the following research hypothesis was placed:
There is a significant difference between the average development of the cognitive level of

the female farmer's experimental group and the control group.

Research limits:

The research is limited by (rural women) of the two experiment groups.

2. Research method:

1) Experimental Design

The design of the experimental equivalent groups with Completely Randomized Design (CRD) was used. This design is characterized by it flexibility and that the decrease of some of the female farmers does not affect the statistical analysis. Table (1) illustrates the experimental design adopted to achieve the research objectives:

Table 1: experimental design of the research

Experimental group	pre-test	The experimental independent variable (Method of discussion)	post-test
Control group	pre-test	The experimental independent variable (lecture)	post-test

2) Search area:

The area was selected within the province of Wasit, which is about 15 km away from the center of the governorate towards the north of the province, accessibility and the interest of rural women to breeding livestock in (the area under study).

3) Research community and design:

A random sample of 32 female farmers was randomly selected from the total research community (85 farmers), means with 37.6% ratio. The sample (32 female farmers) was divided into two groups in a simple random manner.

4. Research variables and their methods of measurement:

a. The experimental independent variable is the variable to be measured in the dependent variable (the development of the knowledge of the female farmers) and includes the group discussion method.

B. The dependent variable is the variable that is affected by the experimental independent variable and represents the development of the cognitive level of the female farmers.

c. Non-experimental independent variables are the variables that may affect the dependent variable, and the failure to adjust them cannot determine the independent effect of the experimental variable in the dependent variable. These variables include:

- Age
- Educational level
- The desire for indicative education

Research tools

The following research tools have been prepared to achieve the research objective:

a. Questionnaire for independent variables other than experimental, including age, educational level of the interviewees, The desire for indicative education, The data collection started on 5/10/2014 and ended on 7/10/2017 and through the collective interview with the assistance and attendance of the thematic specialist.

b. Preparing a test for the cognitive level of the female farmers

A test was conducted for the knowledge level of the female farmers (27) behavioral objectives according to the first three levels: knowledge (10 goals) and comprehension (10 goals), application (7 goals) of Bloom's cognitive classification S. Bloom), distributed according to their relative importance and are shown below:

- Knowledge and memory 37%
- assimilation and understanding 37%
- Application 26%

The relative importance of knowledge levels has been determined according to the following principles:

1. The importance of the cognitive level for the subjects.

2. Opinion of experts who have been tested on them.

3. According to the following rule

The relative importance of behavioral goals =

$$\frac{\text{Number of behavioral goal paragraphs}}{\text{Number of total test paragraphs}} \times 100$$

6. Measurement

The measurement included:

A - Ensure the characteristics of the test to develop the knowledge level to the female farmers, and the researcher adopted the method of paragraph analysis to verify the following characteristics:

First: honesty

(Virtual honesty and Believe the content) by presented it to a group of specialists in education, psychology, agricultural extension and Substantive specialists in the field of livestock and poultry.

Second: Reliability

The test was measured using the Half-Spilt Method using the Pearson correlation equation. The degree of error was (0.77) represented half of the test, and the correction was performed using the Isaac and spearman-Brown equation. The stability was 0.87.

Third: Analysis of the test paragraphs

1. The degree of difficulty of the paragraph: This factor was measured through the equation to calculate the degree of difficulty of the paragraph where the researcher found that the coefficient of difficulty of the test paragraphs between (0.4 - 0.75), and the average estimate (5750.), Anne indicated [5] It is good at the difficulty level (0.50).

2. The strength of the discrimination of the paragraph: The strength of the distinction between the test paragraphs ranges between 0.39-0.67 and an average of (530). Therefore, the test paragraphs are distinguished according to Eble [6].

B - measuring the level of development of knowledge of the female farmers

The cognitive level of the female farmers is calculated for each group before the experiment is carried out, and the average knowledge level is extracted to them, then for each group. The experiment is then carried out. The post-test is conducted for each group to determine the cognitive level of the female farmers. Then the average knowledge of the female farmers for each group is extracted, The average cognitive development of the group's female farmers is defined according to the following equation:

Average development of the knowledge of the female farmers group = the average of the post test of the group - the average of the pre-test of the group itself.

7. Pre-test

After the completion of the test of the knowledge level of the female farmers was conducted for the two groups of experiment in a post way to determine the knowledge level of the female farmers before the implementation of the experiment, the degree ranged between (0-27) degree, and obtained the results of the pre-test as shown in Table (1)

Table 2: Pre-test categories for the two research groups and their percentages

Pre-test categories	Standard score	Group	Number	Percentage
Low	Less than (-1)	First	11	34.4
		Second	10	31.3
medium	Between (-1, +1)	First	4	12.5
		Second	5	15.6
High	More than (+1)	First	1	3.1
		Second	1	3.1
Sum			32	100

First group X= **11.90**　　　Second group X = **12.10**

8. Equivalent of Two Research Group

The two groups were matched according to independent non-experimental variables (age, educational level of female farmers, the desire for indicative education).

The statistical method was adopted, where the results were certain for the equivalent of the two research groups according to the following variables:

A. The age:

In order to achieve the parity between the two groups according to the age variable, the analysis of mono variance was used. The calculated value of F was 0.34, The value of the tabular F was (4.17)

with two freedom degree (30.1) and with a significant level (0.05).

B - The educational level of the female farmers

The method of analysis of mono-variance was used to analyze the differences between the two experimental groups according to their educational level variable in order to achieve parity between the two groups, Where the value of calculated F (1.32), while the value of the tabular F (4.17) with two freedom degree (30.1) and with a significant level (0.05).

C- The desire for indicative education

The equivalence between the two groups was determined according to the variable of the female farmers' desire in the indicative education using the method of analysis of the mono-variance in which the calculated F value was 0.60 while the value of the tabular F was 4.17, the values of freedom were (30.1) and with a significant level (0.05).

9. Execute the experiment

The actual implementation of the experiment began on 9/October/ 2017 as shown in the following table:

Table 3: Timetable for the implementation of the two research groups experiment

Group	Day	The hour	Date of post-test
First	Saturday	8:30 Am	9/10/2017
Second	Sunday	8:30 Am	9/10/2017

10. Post-test

After the completion of the instruction process of the two groups of research, each was tested after 10 minutes - without the knowledge of the test subjects - and using the same pre-testing tool and with the assistance of the thematic specialization mentioned in the schedule, as shown in Table (2). The correct answer was given one degree and the error was zero, where the test score was between zero and 27 degrees. The results of the post-test were presented in the following table:

Table 4: Post-test categories for the two research groups and percentages

Post-Test categories	Standard score	Group	Number	Percentage
Low	Less than (-1)	First (Experimental)	1	3.1
		Second (control)	3	9.3
Medium	Between (-1, +1)	First (Experimental)	6	19
		Second (control)	2	6.2
High	More than (+1)	First (Experimental)	19	59.3
		Second (control)	1	3.1
Sum			32	100

Experimental group X= **19.5**   Control group X = **13.5**

3. RESULTS

First: Results related to Pre-testing and post-testing to develop the knowledge of the female farmers

The results of the statistical analysis showed that the highest numerical value obtained by the female farmers in the pre-test is (14.3) degree and the lowest numerical value is (10.1) with a average of (12) degree,

While the highest numerical value obtained by the female farmers in the post-test is (22) degrees and the lowest numerical value (17.5) degree and with a average of (19.5) degree. In order to determine if there was a difference between the two tests, the analysis of the mono-variance was used for this purpose. The results were presented in the following table:

Table 5: Results of the development of the knowledge level
of the female farmers in the pre and post tests

Source of variance	Total squares	Degrees of freedom	Average groups	Calculated F value	Significant level
Between groups	1850.380	1	1850.380		
Within groups	2012.211	30	67.0737	27.587	**
Total	3862.590	31			

The results of the above table indicate that there is a significant difference in the development of the knowledge level of the female farmers in the pre-teat and post-tests with a significant level of (0.01), where the calculated F (27.587), while the value of the tabular F with two degrees of freedom (30.1) was equals to (7.56), It accepts the hypothesis of research that states: (There is a significant difference between the average development of the cognitive level between the female farmers experimental group and the control group).

In order to determine which of the two tests was the development of the knowledge level of the female farmers in it higher, means determine the direction of the significant of differences - The average of each test was adopted to compare them, Where the rate that female farmers obtained by the post-test is (17.5) higher than the average that female farmers obtained by the pre-test (12) degrees.

This indicates that the development of the cognitive level of the female farmers- Because of the post-test - there was a change from what was in the pre-test, This is due to the effect of the experimental variable (indicative method) Which have been introduced in the experiment other than pre-testing, where it was not preceded by the introduction of that variable.

Second: Results related to the effect of the indicative method in developing the cognitive level of the researchers towards the technique of breeding the quail bird in the cages.

In order to identify the effect of the indicative method - the method of discussion - in the development of the level of knowledge of the female farmers, the experimental design was used, the arithmetic average was calculated and the value of F was extracted and compared it with the tabular as shown in the following table:

Table 6: Results of variance to compare the average development of the knowledge level of the female farmers in the post-test

Comparison	Number	Arithmetic average	Calculated F	Significant level	LSD value
The experimental group (Discussion Method Group)	16	19.5	9.867	0.01	0.82
Control group	16	13.5			

It is clear from the above table that the arithmetic average of the group with which the discussion method was used was 19.5, Which is higher than the arithmetic average of the control group (13.5), To determine whether this difference was significant, the mono-variance analysis was used, with two degree of freedom (30.1), The calculated value of F reached of (9.867), Which is higher than the value of the F tabular (7.56) and with a significant level (0.01), Therefore, the second research hypothesis is accepted, which states: There is a significant difference between the average development of the cognitive level of the female farmers as a result of the exposure of the experimental group to influence the

method of discussion, And the control group (lecture method).

CONCLUSIONS:

The most important conclusions reached by the researcher are:

1. The indicative method used in the experiment (the method of discussion) has had an impact on the development of the knowledge level of female farmers when compared with the effect of the lecture method used in the control group.

2. The method of collective discussion provided an opportunity for female farmers to present their opinions, ideas and experiences through participation in the discussion on one hand and to provide an opportunity for the

researcher to know the extent of the female farmers' understanding and knowledge of the information and guidance provided to them on the other hand.

Recommendations:
1. For the success of the instructional educational work, the researcher recommends using the method of discussion in the cognitive development of the female farmers for their effective contribution in the transfer of modern technologies with the opportunity to study all aspects and with the assistance of the competent in terms of the knowledge to be transferred or the skills required by that technology.

2. To transfer a specific technology to the reality of rural women requires the researcher to collect all the information related to the region with the possibility of dissemination of technology later, and therefore recommends to study the extent of rural women's willingness to accept new ideas and the extent of need for the technology already developed.

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