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Age, Educational and Indicative Service Levels and Their Relationship to The level of Performance of Agricultural Extension Workers in Diyala governorate

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age levels, educational levels, guidance service levels, agricultural extension workers, performance.

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ABSTRACT

The research aimed to identify the level of performance of workers in agricultural extension in Diyala Governorate in general, as well as to identify the level of performance of workers in agricultural extension in the fields of extension work, namely (organization, planning, implementation, evaluation and technology transfer), As well as identifying the correlation between the performance of workers in agricultural extension the number of years of life, the levels of agricultural academic study, and the number of years of extension service .The research population included all agricultural extension workers in the Directorate of Agriculture and Agricultural People and the Extension Center if the number of its employees reached (460) employees .The research showed that the level of performance of agricultural employees in Diyala province is of the average category in general ,There was a contrast in the level of performance of employees in the fields extension work, as it was found that the level of performance of employees in the fields of organization, planning and implementation is average. In the fields of evaluation and technology transfer, performance was average and tended to decline ,The research showed that there is a significant correlation between the level of performance of the respondents, and the variable of the number of years life, the number of years of agricultural academic study, and the number of years of extension service. The researcher recommends the importance of determining the actual extension work of agricultural workers, and holding training courses for agricultural cadres working in the field of agricultural extension to raise the level of their performance, especially in the fields of evaluation and technology transfer , and the need to pay attention to independent variables that have a moral correlation when preparing for job courses.

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المستويات العمرية والتعليمية والخدمة الإرشادية وعلاقتها بمستوى اداء العاملين في الإرشاد الزراعي في محافظة ديالى

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الخلاصة

استهدف البحث التعرف على مستوى اداء العاملين في الارشاد الزراعي في محافظة ديالى بشكل عام , وكذلك التعرف على مستوى اداء العاملين في الإرشاد الزراعي في مجالات العمل الإرشادي وهي (التنظيم و التخطيط و التنفيذ و التقويم و نقل التقنيات), وكذلك التعرف على علاقة الارتباط بين اداء العاملين في الإرشاد الزراعي عدد سنوات العمر , ومستويات الدراسة الأكاديمية الزراعية , وعدد سنوات الخدمة الإرشادية, شمل مجتمع البحث جميع العاملين بالارشاد الزراعي في مديرية الزراعة والشعب الزراعية والمركز الارشادي أذ بلغ عدد موظفيها (460) موظفاً , وظهر من البحث ان مستوى اداء الموظفين الزراعيين في محافظة ديالى من فئة المتوسط بصورة عامة , وظهر وجود تباين في مستوى اداء الموظفين في مجالات العمل الإرشادي اذ تبين ان مستوى اداء الموظفين في مجالات التنظيم و التخطيط و التنفيذ متوسط . اما في مجالي التقويم و نقل التقنيات فكان الأداء متوسط يميل للإنخفاض , وظهر من البحث ان هناك علاقة ارتباط معنوية بين مستوى اداء المبحوثين , ومتغيرات عدد سنوات العمر , عدد سنوات الدراسة الأكاديمية الزراعية , وعدد سنوات الخدمة الإرشادية . يوصي الباحث بأهمية تحديد العمل الإرشادي الفعلي للعاملين الزراعيين. و عقد دورات تدريبية للكوادر الزراعية العاملة في مجال الإرشاد الزراعي لرفع مستوى أدائهم خاصة في مجالات التقييم ونقل التكنولوجيا , وضرورة الأهتمام بالمتغيرات المستقلة التي لها علاقة ارتباط معنوية عند التهيئة والإعداد للدورات الوظيفية.

الكلمات المفتاحية: المستويات العمرية , المستويات التعليمية , مستويات الخدمة الإرشادية, العاملين بالارشاد, الاداء

INTRODUCTION

The agricultural sector is the main pillar of comprehensive development in developing countries, because most of the members of societies in these countries are present in rural areas, and therefore comprehensive development has become an important demand, especially in developing countries, and for the purpose of developing development plans and ensuring their success requires attention to creating programs that care about all levels and in various fields, in particular the introduction of educational programs for rural people and their families to help them learn modern agricultural methods (Hussein & Morsi, 2009) One of the most important actors in achieving sustainable agricultural development is agricultural guidance, so the transfer of modern agriculture and technology, and the deployment of modern and good agricultural methods requires the carrying out of broad indicative tasks and responsibilities (Khalidi & Jahjah, 2008) In order to reach the objectives of agricultural guidance, the human resources available must be relied upon, namely, the guidance staff, and in the light of the competence and experience of the guidance staff, the quality of the guidance services is determined (Sheikh, 1999). In order for the guidance system to perform what is required of it, it needs to carry out effective indicative activities that require the preparation of guidance programs and plans commensurate with these activities and program these plans in organizational and administrative units, as the preparation process includes the development of plans, implementation, evaluation and follow-up to know the competence of the workers, which is the basic stage to do what they are asked to do (Went, 1993)

The mentoring programme is defined as a package of activities of a indicative educational nature aimed at producing an acceptable outcome or set of results for the beneficiaries of this programme through a clear operational plan and objectives that can be measured with financial support (M & Mechael, 2016) One of the

guiding tasks of agricultural guides in the fields of organization, planning, implementation and evaluation is to give farmers new methods and ideas, to provide them with modern agricultural skills, to identify and train local leaders, as well as to take care of rural youth, collect data on agricultural reality, ensure the establishment of the best social relations with the rural population, identify their needs, problems, and raise these problems and needs to research centers and decision makers to develop solutions to them, Applying these solutions to the agricultural reality in the region, working on the preparation of guidance programs, preparing guidance reports, and conducting field visits to farmers' fields (Bakri, 2004) . He also urged farmers to adopt modern agricultural techniques, make a final assessment of the guidance program implemented and benefit from the results of the evaluation in preparing for future pilot programs (Regional Workshop, 2007). Studies in Iraq indicate a decrease in the level of performance of agricultural extension workers due to the large responsibilities, size of the tasks assigned to them and the degree of appropriateness of the academic specialization, as well as the skills and abilities of the indicative staff and the matching of the name of the job with the type of work they do (Ali, 2013). A pilot study found a range of constraints in the work of Extension, including administrative problems, unclear work standards, evaluation of performance, shortage of indicative staff, poor pre-and-during-service qualification, poor affiliate and evaluation of staff performance, and the implementation of mentoring programmes, administrative and organizational weakness, and the absence of material and moral motivation for distinguished mentors in their work (Arab Organization for Agricultural Development, 1994), as well as the apparent weakness on the Calligraphy in the Extension organization due to the lack of organized and continuous method of treatment, and the permanent impact of many variables (Arabic development orgnation 2001) in addition to the poor coordination between scientific research and agricultural extension agencies (Abdul Ali,1995). The level of performance of agricultural extension workers is influenced by a range of variables and problems, so it is important to study the performance of agricultural Extension to enable them to perform better tasks and duties assigned to them, hence the idea of the current study to answer the following questions : What is the level of performance of agricultural extension workers in Diyala province in general? What is the level of performance of workers in each of the following fields : organization, planning, implementation, evaluation, transfer of technologies ? What is the differences between the performance of agricultural extension workers in Diyala province and the following Age, education level and years of extension service?

Search objectives: Determining the level of performance of agricultural extension workers in Diyala province in general. Determining the level of performance of agricultural extension workers in the following fields of work: (organization, planning, implementation, evaluation, and transfer of technologies). Identifying the differences of association between the performance of the workers and each of the following Age, education level and years of extension service

Research Hypothesis: There is no moral correlation between the performance of the workers and the variable number of years of life. There is no moral correlation between the performance of the workers and the change in the number of academic agricultural educational years. There is no moral correlation between the performance of the employees and the variable number of years of indicative service.

The importance of research: The importance of research comes from the importance of the performance of the organization's staff, which is the basis for the organization's overall performance and the possibility of achieving its objectives. Provide a database on the level of performance of agricultural extension workers to carry out extension work according to their age and educational characteristics and indicative experiences. Providing a database on the capabilities and expertise of agricultural extension workers in completing mentoring tasks. Statement of the importance of independent factors (number of years of life, number of years of study, number of years of guidance service) in terms of relationship at the level of performance .

Procedural definitions: Agricultural extension workers: graduates of agricultural institutes and colleges and holders of higher degrees who provide Extension services. Performance level: an indicator that reflects the possibility of accomplishing the Extension tasks by agricultural extension workers. Indicative service levels: the number of years of service in agricultural guidance when conducting research. Educational levels: an indicator that reflects the level of agricultural academic study.

MATERILA AND METHOLOGY

Research methodology:

For the purpose of achieving the objectives of research, the researcher followed the descriptive approach, which is based on the study of the phenomenon as it exists in reality, and this method means to describe the phenomenon accurately and express it quantitatively or qualitatively, the quantitative expression gives the phenomenon a digital description explaining the size and amount of the phenomenon and the extent to which it relates to other phenomena and the descriptive method is a form of interpretation and scientific analysis organized to describe a particular phenomenon or problem, And develop a quantitative perception of it by collecting the data and information that the researcher actually needs about the phenomenon or problem and adopting accuracy in study, classification and analysis (Al Dulaimi,2016).

Search area:

Diyala province has been chosen as a research area northeast of Baghdad, about 60 km away, and is famous for its citrus and palm cultivation, strategic crops and vegetable and fruit crops. Includes a large number of agricultural extension workers. The province is famous for growing different crops. Workers in the Directorate of Agriculture and Agricultural Units perform Extension services. The researcher works at the Extension center in Diyala province and has information about the respondent. Near the research area of the researcher's residence area.

The research population and its sample:

The research population included all the agricultural employees in the Diyala Agriculture Directorate, the Agricultural Divisions and the Extension Center, and their number (460) employees distributed among (19) agricultural divisions, the headquarters of the Directorate of Agriculture and the Extension Center. A proportional random sample of (50%) of the work units was chosen, bringing the number of agricultural employees to (312) distributed among (9) agricultural divisions, the headquarters of the Directorate of Agriculture, and the extension center, and a random sample was chosen at (50%) of the number of employees to be the number of people the sample ((156) respondents after excluding (30) employees from those covered by measuring stability from outside the research sample, and after collecting data, (8) forms were excluded for the lack of answers, and thus the number of employees covered by the study became (148) respondents.

Data collection tool:

Adopted the questionnaire form as a tool for collecting data in order to suit the research methodology and defines the questionnaire as one or several pages containing a set of questions printed and prepared in a way that performs its purpose (Abed Rabbo E., 2005) and prepared the form after the use of expert opinions in the specialist of agricultural Extension, social psychology,

and consisted of two sections included the first section questions about Years of life and years of study, and years of Extension service, the second section included a set of questions for the child variable (performance) and the number (61) paragraphs, and adopted a five-year measure of the answer which is as follows: (always apply - often apply - apply sometimes - apply rarely - do not apply), and digital values have been developed for these alternatives which are (5,4,3,2,1) as in table(1)

Table (1) Distribution of paragraphs to fields :

To	Fields	Paragraphs
1	Organization	5
2	Planning area	23
3	Implementation area	9
4	Calendar area	12
5	Technology transfer	12
	Total	61

After presenting the questionnaire to the expert professors in the agricultural Extension specialists in the faculties of agriculture in the universities of Tikrit, Baghdad, Wasit and experts in the social psychology specialist in the Faculty of Education at the universities of Tikrit, and Diyala, and adopted a percentage of pieces (75%) of the opinions of professors The experts' opinions were taken, as 4 paragraphs were added to the scale's paragraphs in the initial formula, thus the number of the scale's paragraphs reached (61) standard paragraphs in its final version.

RESULTS AND DISCUSSION

The first aim: is to identify the level of performance of agricultural extension workers in Diyala province in general.

The results showed that the lowest value expressed by the level of performance of workers is (115) and the largest value is (277) with an average of (198.74) and a record deviation (26.71) , and divided the respondents into three categories using the law of the range, and showed that the highest percentage in the middle Table (2) distribution of the starters according to the performance level categories in general.category, as shown in table (2).

Table (2) Distribution of the respondents according to the categories of their level of performance in general

No	Categories	Frequency	%	Average
1	Low (115-168)	17	11.5	156.59
2	Average (169-222)	107	72.3	196.26
3	High (223-277)	24	16.2	239.67
	Total	148	100%	Sd=26.71

Table (2) nearly three-quarters of the respondents in the middle category are followed by a high of (16.2%), so the performance level of the respondents is generally described as average, and this may be due to the fact that agricultural extension workers need theoretical and applied academic information and expertise in the field of performing Extension tasks because they include steps and procedures that may be difficult for some of those performing Extension tasks, especially those with

specialized non-agricultural Extension and assigned Extension tasks do it. Shown in table (1).

The results showed that the lowest value expressed by the level of performance of workers in the field of organization is (5) and the largest value is (23) with an average of (14.14) and a record deviation of (3.79), and divided the respondents into three categories using the law of range, and that the highest percentage appeared in the middle category, as shown in table (3).

Table (3) Distribution of the starters according to the categories of performance level in the field of organization.

Table(3) Distribution of respondents according to their level of performance in the field of organization

To	Categories	frequencies	%	Average
1	Low (5-10)	22	14,87	8.55
2	Medium (11-16)	83	56,08	13.16
3	High (17-to more)	43	29,05	18.91
Total		148	100%	3.79sd=

Table (3) shows that more than half of the respondents in the middle category, followed by the high of (29.05%) , therefore, describes the level of performance of the organizers as average tends to rise, and this may be because the process of organizing is an important process in the indicative work because it is a key step on which to build the planning process for indicative activities, so agricultural extension workers should put the organization process as a priority of their indicative work.

Planning field:

The results showed that the lowest value expressed by the performance of the workers in the field of planning is(41) and the largest value is (107) with an average of (82.98) and a record deviation of (11.88) section of the section of the respondents into three categories using the law of range, and it appeared that the highest percentage in the top category as shown in the table (4)

Table (4) Distribution of the starters according to the level of performance in the field of planning

To	Categories	frequencies	%	Average
1	Low (41-62)	10	6,76	56.20
2	Medium (63-84)	65	43.92	76.48
3	High (85-107)	73	49.32	93.41
Total		148	100%	Sd=11.88

Table 4 shows that (49.92%) in the high category, followed by the middle group with (43.92%), so the level of performance of the surveyors in the field of planning is described as high to average and may be due to the recognition of the importance of the planning process in the indicative work, and this importance comes from the fact that the rest of the indicative activities depend on what was put in the planning process, and that the planning process for activities and Extension programs is one of the first tasks of indicative work and has a lot in it One of the steps and procedures that the guidance workers must understand and apply as well as their practice of this process, which increased their experience and knowledge in the field of planning due to the view of the buyers of the importance of the field of planning in the field of Extension work and the experiences obtained as a result of the practice of this process in the preparation of Extension programs.

Implementation field :

The results showed that the lowest value expressed by the performance level of the appal the show in the field of implementation is 18 and the largest value is (42) with an average of(32.49) and a record deviation of (4.47) , the respondents were divided into three categories using the law of the range, and it appeared that the highest percentage in the middle category as shown in table (5).

Table (5) represents the distribution of the starters according to the level of performance in the field of implementation

To	Categories	frequencies	%	Average
1	Low (18-25)	10	6.76	22.70
2	Medium (26-33)	76	51.35	30.43
3	High (34-42)	62	41.89	36.60
Total		148	100%	Sd=4.47

It is clear from table (5) that more than half of the respondents fall into the middle category followed by the high category by (41.89%) , so the level of performance of the buyers in the field of implementation is described as average tends to rise, and may be due to the fact that the implementation process needs practical Extension experience in order to implement and may have these experiences who actually practice the implementation of Extension activities and have academic experience on the requirements of carrying out activities, What are the necessary measures for implementation in order for the activity to achieve the objectives for which it existed.

Calendar field:

The results showed that the lowest value expressed by the performance of workers in the field of evaluation is (12) and the largest expressive value is (54) with an average of (34.03) and a record deviation of (7.52) , and divided the respondents into three categories using the law of range, and showed that the highest percentage in the middle category, as shown in table (6).

Table (6) Distribution of the starters according to the categories of the calendar field.

To	Categories	frequencies	%	Average
1	Low (12-25)	19	12,83	22.00
2	Medium (26-39)	97	65,55	33.09
3	High (40-54)	32	21,62	44.03
Total		148	100%	Sd=7.52

Table (6) shows that (65.55%) of respondents are in the middle category, followed by the top (21.62%) and the lowest by (12.83%), so the performance of the respondents is described in the field of The calendar is generally average, and the reason may be that the evaluation process needs knowledge and information to prepare criteria for evaluation may be difficult to set for some workers with Extension from non- Extension disciplines, as well as the evaluation process may be practiced by evaluators from outside the workers of the indicative activities and therefore may not practice it Many agricultural extension workers, except in the case of a single calendar or a joint calendar in which the workers participate in the activity with program calendar from outside the activity or program.

The technology transfer field:

The results showed that the lowest value expressing the performance of the demonstrators in the field of technology transfer is (20) and the largest expressive value is (59) with an average of (35.08) and a record deviation of (6.89), and divided the respondents into three categories according

to the law of range, and showed that the highest percentage in the middle category as shown in table (7).

Table (7) Distribution of the starters according to the categories of the field of transport of agricultural technologies.

To	Categories	frequencies	%	Average
1	Low (20-32)	60	40,54	28.88
2	Medium (33-45)	78	52,70	37.77
3	High (46-59)	10	6,76	51.40
Total		148	100%	Sd=6.89

Shown from table (7) More than half of the respondents are in the middle category, followed by the low category by (40.54%) , so the level of performance of the starters in the field of technology transfer is described as average tends to decrease, and may be due to the poor information and experience of the appreputes in the field of transporting agricultural technologies .

Aim three: Identify the difference in the performance of employees according to the levels of each of the following variables (age levels, educational levels, indicative service levels).

1- Age levels Table (8) Analysis of the difference between the average performance of the respondents depending on age levels.

Level	Total boxes	d.f	MSE	F value	P-value
Between groups	6678.989	2	3339.495	**4.930	0.008
Within groups	98217.254	145	677.360		
Total	104896.243	147	** at 0.01 . probability level		

Table(8) shows that there is a moral difference at the probability level of(0.01) between the average performance of the respondents according to the age levels, The result indicates that there is a significant difference between the levels of the studied factor, and this means that the level of performance of the respondents varies according to the levels of the studied factor

Educational levels:

The results of the analysis of mono disparity showed a moral difference between the average performance of the respondents according to the levels of education, as shown in table (9).

Table (9) Results of the variability analysis of the difference between the average performance of the respondents depending on the education

Level	Total boxes	d.f	MSE	F value	P-value
Between groups	9583.872	2	4791.936	7.290**	0.001
Within groups	95312.371	145	657.327		
Total	104896.243	147	** at 0.01 . probability level		

Table (9) shows a moral difference at a probability level of (0.01) between the average performance of the surveyors according to the levels of education, The result indicates that there is a

significant difference between the levels of the studied factor, and this means that the level of performance of the respondents varies according to the levels of the studied factor.

Levels of indicative service:

The results of the variance analysis showed a moral difference between the average performance of the respondents according to the levels of indicative service, as shown in table (10).

Table (10) Results of the analysis of the single variation of the difference between the average performance of the respondents according to the levels of indicative service.

Level	Total boxes	d.f	MSE	F value	P-value
Between groups	21077.154	2	10538.577	18.231**	0.000
Within groups	83819.089	145	578.063		
Total	104896.243	147	** at 0.01 . probability level		

Table (10) shows a moral difference at the probability level of (0.01) between the average performance of the surveyors according to the levels of indicative service, The result indicates that there is a significant difference between the levels of the studied factor, and this means that the level of performance of the respondents varies according to the levels of the studied factor

CONCLUSION

The results showed that the level of performance of agricultural employees in carrying out indicative work in Diyala province is generally average, and it is concluded that agricultural staff working in agricultural extension need skills and experience to contribute to raising the level of performance. It turns out that the level of performance of agricultural employees in the indicative work varies by areas as it appeared that the level of performance in the areas of organization, planning, and implementation is average tends to rise and may be due to the continuous practice of these areas, which has gained them some experience more than the rest of the fields. It appeared that the level of performance in the field of evaluation was generally average and may be the reason that the respondents do not know the criteria of the calendar or that this process is conducted by the higher authorities, and the employees do not participate in it permanently. The results of the research showed that the level of performance of employees in the field of technology transfer was average tends to decrease, and may be due to their lack of experience in this field because they practice this process less than the rest of the fields there is a differences the level of performance of the exterminators and the variables of the years of life, and the years of study, and the years of service Extension concludes from this the importance of these factors in improving the level of performance of the exterminators. The results showed that the average performance of the surveyors increases by the differences of levels of factor of years of life and years of study and Extension service, because the F-value significant at 0.01 probability level.

CONFLICT OF INTEREST

The authors declare no conflicts of interest associated with this manuscript.

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