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Article

Job Satisfaction Level of Agricultural Extension Workers in Kirkuk Governorate and Its Relationship with Their Performance Level and Selected Personal Characteristics

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Abstract: The present study was conducted to examine the effect of demographic and social factors on the job performance and job satisfaction of agricultural extension personnel, filling the research gap created by the scarcity of field-based research conducted in the Directorate of Agricultural Extension, Kirkuk. The research community consists of (61) extension workers at the Agricultural Extension Training Center, Kirkuk Governorate. A descriptive-analytical approach was applied to fulfill the research objectives. A set of questions was designed to collect the required data, divided into two sections. The first section was designed to collect information about the socio-demographic and professional factors of the research community, such as the level of satisfaction with the supervisor-subordinate relationship, financial satisfaction, work environment satisfaction, and satisfaction with training programs. The second section was designed to measure the level of job performance. A Job Satisfaction Scale, with four dimensions, and a Job Performance Scale were designed to measure the level of job satisfaction and job performance, respectively. Data analysis was conducted using the Statistical Package for Social Sciences (SPSS). The results showed that the level of job satisfaction for extension workers was moderate, as was the level of the four dimensions of job satisfaction. In contrast, the level of job performance was moderate to high. A strong positive correlation was established between job satisfaction and job performance. The majority of the population sampled, at (57.37%), fell within the range of between (25 – 38) years of age. Gender was found to have a limited influence on job performance in favor of males, although this was only found to be statistically significant at a marginal level of (0.34*). Conversely, gender was found to have no influence on job satisfaction. Educational qualification, academic specialization, and years of experience were found to have no influence on job performance and job satisfaction. However, a trend was noted in which the level of job satisfaction declined with an increase in years of experience. Additionally, a strong positive correlation was established between job satisfaction and job performance. Furthermore, Rural upbringing exhibited a statistically significant positive association with job performance (r = 0.293**) without influencing job satisfaction. Additionally, no influence was found for training courses on either job satisfaction and job performance. The findings of this study

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establish that the major factors affecting job performance and job satisfaction of extension staff in the field relate to actual field experience, professional competence, and nature of extension work.

Keywords: Job Satisfaction, Performance, Agricultural Extension, Demographic Characteristics, Training Programs, Upbringing.

Introduction and Research Problem

Agricultural development is considered one of the fundamental pillars for achieving sustainable development in many countries, particularly in regions that rely primarily on the agricultural sector for food security and economic resources [1]. Agriculture plays a vital role in improving living standards and generating employment opportunities, especially in rural communities where it constitutes the main source of livelihood for a large proportion of the population. With the increasing demand for food driven by rapid population growth, it has become essential to modernize the agricultural sector by upgrading farming practices and equipping farmers with advanced knowledge and technologies that enhance productivity and improve crop quality [2].

Agricultural extension represents one of the principal mechanisms in this transformation process, as it facilitates the transfer of modern agricultural knowledge to farmers and guides them toward best agricultural practices that improve productivity and reduce losses. Extension services encompass a broad range of activities, including crop management guidance, pest control, modern irrigation techniques, and efficient fertilizer use. Agricultural extension personnel aim to provide both technical and administrative support to farmers to ensure the effective implementation of modern agricultural practices and the achievement of optimal productivity levels [3].

The efficiency and effectiveness of agricultural extension personnel in performing their duties are closely linked to their level of job satisfaction. Extension workers face multiple challenges that may affect their professional performance, including limited resources, inadequate financial incentives, and continuous work-related pressures. Therefore, job satisfaction is considered a critical factor that can significantly influence the quality of work delivered by extension agents. Job satisfaction is defined as the overall evaluation of the work environment, encompassing factors such as relationships with colleagues, administrative support, financial incentives, training and professional development opportunities, as well as the sense of appreciation and recognition from both the community and farmers [4].

Recent studies indicate that job satisfaction among agricultural extension personnel can exert a strong influence on performance and productivity levels. In many developing countries, extension workers encounter difficult working conditions, such as insufficient specialized training, limited financial incentives, and reliance on traditional working methods, which often lead to lower levels of job satisfaction. These circumstances may result in frustration among personnel, negatively affecting their performance and consequently reducing the overall effectiveness of agricultural extension services, thereby indirectly influencing regional agricultural productivity [5].

In certain rural areas such as Kirkuk Province in Iraq, agricultural extension personnel face additional challenges related to economic and political instability. These workers may encounter difficulties in securing the necessary resources to implement extension programs, in addition to challenges associated with climate change and environmental degradation. It is therefore essential to assess the extent to which these factors influence job satisfaction and to explore ways to improve the work environment to achieve better extension outcomes [6].

Several studies have demonstrated that providing a supportive and motivating work environment can enhance job satisfaction, which in turn improves performance and outcomes. For instance, [7] indicate that continuous training programs, increased financial incentives and rewards, and improvements in the work environment can contribute to strengthening job satisfaction among agricultural extension workers and enhancing their capacity to deliver effective advisory services to farmers.

Moreover, the utilization of the Internet in agricultural work has contributed to improving job performance and may play a significant role in enhancing the agricultural extension work environment. Online platforms and social media applications such as YouTube can serve as effective tools for disseminating agricultural knowledge and educating farmers, thereby improving overall performance within the agricultural sector [8].

Job satisfaction constitutes a cornerstone in motivating employees. It is not solely associated with financial rewards but also with a sense of achievement, professional recognition, and developmental opportunities. Within the framework of this study, particular emphasis is placed on these dimensions and their influence on the professional performance of agricultural extension personnel in Kirkuk. The findings of this research are expected to provide valuable insights for agricultural extension institutions in Iraq and other countries facing similar conditions to enhance the work environment and improve the effectiveness of this vital sector [9].

Improving the agricultural extension work environment requires the development of motivating institutional policies. Challenges related to appropriate incentive systems and continuous education significantly affect job satisfaction levels. Institutional support plays a crucial role in strengthening job satisfaction, as the availability of training and mentoring programs can contribute to skill development and increased awareness of recent advancements in the agricultural sector [10].

The present study represents an attempt to understand the level of job satisfaction among agricultural extension personnel in Kirkuk Province by analyzing the factors influencing satisfaction and providing recommendations to improve the work environment and enhance employee motivation. The study focuses on economic, social, and educational factors affecting job satisfaction and explores how these factors influence the ability of extension personnel to perform their duties effectively. Through this analysis, the research seeks to identify the key challenges faced by agricultural extension personnel in Kirkuk and to propose practical approaches to enhance their conditions, thereby strengthening the effectiveness of this essential sector.

Accordingly, the study seeks to answer the following research questions:

- What is the overall level of job satisfaction among agricultural extension personnel in Kirkuk Province?
- What is the level of job satisfaction across the following domains: supervisor–subordinate relationships, financial aspects, work environment, and employee training programs?
- What is the level of job performance in performing extension duties in Kirkuk Province?
- What is the correlation between job satisfaction and job performance, and between these dependent variables and the following independent variables: age, gender, educational qualification, years of experience in agricultural extension, academic specialization, upbringing, and participation in training courses?

Research Objectives:

- Determine the general level of job satisfaction of agricultural extension workers in Kirkuk Governorate.
- Identify the levels of job satisfaction of agricultural extension workers in Kirkuk Governorate concerning the following job satisfaction areas: general job satisfaction, financial satisfaction, satisfaction with the work environment, and satisfaction with employee training programs.
- Evaluate the level of performance of agricultural extension workers in performing extension activities in Kirkuk Governorate.
- Investigate the correlation between employees' job satisfaction and job performance, and between these dependent variables and the independent variables of gender, age, educational qualification, years of experience in extension work, field of specialization, upbringing, and participation in training courses.

Research Hypotheses:

- The study aims to test the null hypothesis that there is no significant correlation between the level of job satisfaction of agricultural extension workers in Kirkuk Governorate and their level of job performance.
- It also aims to test the null hypothesis that there is no significant correlation between the level of

job satisfaction and the independent variables of gender, age, educational qualification, years of experience in extension work, field of specialization, upbringing, and participation in training courses.

Research Methodology:

The descriptive research method was used to carry out this study since it was most appropriate to address the objectives of the study and the nature of the investigation.

Population and Sample

The population of this study consisted of all agricultural extension and training employees in Kirkuk Governorate, numbering 61 people.

To accomplish these objectives, a structured questionnaire was used as the main means to collect the required data. The structured questionnaire was divided into two main parts:

Part I: The demographic and social attributes of the employees in agricultural extension and training in Kirkuk Governorate, which include gender, age, educational qualification, years of experience in agricultural extension, specialization, upbringing, and training courses.

Part II: The dependent variables, which are divided into two domains:

- Domain One: Job Satisfaction Scale, which consists of four dimensions: overall job satisfaction, financial satisfaction, satisfaction with the work environment, and satisfaction with training programs for employees. It consists of 31 statements.
- Domain Two: Performance Level, which consists of 15 statements to assess the level of extension task performance.

For each statement in each domain, respondents were required to select one of five statements: Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree, which are assigned 5, 4, 3, 2, 1 points, respectively.

The validity of the structured questionnaire was established upon evaluation by specialists in agricultural extension. The results from experts suggested that the structured questionnaire was valid; therefore, it was slightly modified to suit certain statements, which were then revised accordingly.

Data collection was carried out from 16 April 2025 to 29 June 2025. The collected data was then analyzed using various statistical tests, including range, percentages, arithmetic mean, standard deviation, Spearman's rank correlation coefficient, Pearson Brown correlation coefficient, and 't' test. The statistical tests were carried out using SPSS.

Results

First Objective: Assessing the Overall Level of Job Satisfaction among Agricultural Extension Workers in Kirkuk Governorate

As presented in Table 1, the range for the total score for job satisfaction among agricultural extension workers falls between 53 and 116, with a mean value of 86.21 and a standard deviation of 14.31, indicating that there was a moderate variation in the level of satisfaction among respondents.

Moreover, the range for low satisfaction (53-73) was represented by 19.67% (n=12), while the range for medium satisfaction (74-94) was the highest at 52.45% (n=32), followed by the range for high satisfaction (95-116) at 27.86% (n=17).

This shows that the majority of agricultural extension workers experienced a moderate to high level of satisfaction, which may imply that there was a favorable working condition for these workers. The variation among respondents may be due to a number of factors affecting job satisfaction, not limited to the personal characteristics of the respondents. This argument can be sustained by earlier studies that showed no statistically significant relationship between most of the personal characteristics and job satisfaction, except for some aspects that could affect performance.

Table 1. Distribution of Agricultural Extension Workers in Kirkuk Governorate According to Overall Job Satisfaction

Satisfaction Category	Score Range	Frequency (n)	Percentage (%)	Mean Score
Low	53–73	12	19.67	64.66
Medium	74–94	32	52.45	84.44
High	95–116	17	27.86	101.70
Total	—	**61**	**100**	—

Second Objective: Job Satisfaction According to Specific Domains:

1. Satisfaction with Subordinates

From the results, it is evident that job satisfaction for employees in relation to their subordinates in agricultural extension varies from 14 to 30. The mean value is 23.08, and the standard deviation is 3.499. The results show that there is some variability in job satisfaction levels for the respondents.

In this study, 13.1% (n = 8) fall in the low job satisfaction category (14-18), 37.7% (n = 23) fall in the medium job satisfaction category (19-23), while 49.2% (n = 30) fall in the high job satisfaction category (24-30). The results show that most of the employees in agricultural extension are highly satisfied with their subordinates, indicating a positive relationship in the organizational environment. The results also show that a small number of employees fall in the low job satisfaction category; therefore, these should be taken into consideration in terms of providing better working conditions to increase positive working relations. The results show that there is a positive level of job satisfaction in general; therefore, these should be taken into consideration in terms of providing better working conditions to increase positive working relations.

Table 2. Distribution of Agricultural Extension Workers According to Satisfaction with Subordinates

Satisfaction Category	Score Range	Frequency (n)	Percentage (%)	Mean Score
Low	14–18	8	13.10	17.13
Medium	19–23	23	37.70	21.35
High	24–30	30	49.20	26.00
Total	—	**61**	**100**	—

2. Financial Satisfaction

The results show that the range for financial satisfaction in agricultural extension workers is between 7 and 31 points, with a mean value of 18.73 and a standard deviation of 5.25. The range for low satisfaction (7-14) accounts for 27.8% (n = 17) of all respondents. This suggests that a large number of workers are not financially satisfied. The range for medium satisfaction (15-22) accounts for 50.8% (n = 31) of all respondents. The results suggest that most workers are moderately financially satisfied. The range for high satisfaction (23 and above) accounts for 21.4% (n = 13) of all respondents. The results suggest that a small number of workers are highly financially satisfied.

The results suggest that there are challenges in the financial aspect of agricultural extension workers. The differences in levels of financial satisfaction could be due to a number of factors. These factors include wage policy, financial incentives, efficiency in the institutional financial system, and cost of living. The results suggest that there is a need to improve the financial support to these workers to ensure that there is less dissatisfaction. The results also suggest that there is a need to motivate workers in the medium category to attain a higher level of satisfaction.

Table 3. Distribution of Agricultural Extension Workers According to Financial Satisfaction

Satisfaction Category	Score Range	Frequency (n)	Percentage (%)	Mean Score
Low	7–14	17	27.8	12.47
Medium	15–22	31	50.8	19.06
High	≥ 23	13	21.4	26.15
Total	—	**61**	**100**	—

3. Satisfaction with the Work Environment

The results revealed that the satisfaction level with the work environment ranged between 7 and 30, with an average of 22.90 and a standard deviation of 5.12. This implies that there was a moderate variation in the perceptions of the employees. The low level of satisfaction ranged between 7 and 14, accounting for 27.8% (n = 17). This implies that a substantial number of employees perceive some shortcomings or deficiencies in the work environment. The medium level of satisfaction ranged between 15 and 22, accounting for 50.8% (n = 31). This implies that half of the employees perceive a moderate level of satisfaction with the work environment; therefore, there are some positive aspects alongside some shortcomings or deficiencies. The high level of satisfaction ranged above 23, accounting for 21.4% (n = 13). This implies that a substantial number of employees are highly satisfied with the work environment; therefore, there are some positive aspects alongside some shortcomings or deficiencies.

The above results imply that although the work environment in agricultural extension is relatively satisfactory, there are still some shortcomings or deficiencies that need to be addressed to make the work environment more attractive and comfortable to the employees in order to enhance their motivation and the effectiveness of the organization.

Table 4. Distribution of Agricultural Extension Workers According to Satisfaction with the Work Environment

Satisfaction Category	Score Range	Frequency (n)	Percentage (%)	Mean Score
Low	7–14	17	27.8	16.47
Medium	15–22	31	50.8	23.69
High	≥ 23	13	21.4	29.92
Total	—	**61**	**100**	—

4. Satisfaction with Training Programs

The findings revealed that the level of satisfaction with training programs for employees ranged between 11 and 32 on the assessing scale, with an average of 21.49 and a standard deviation of 4.74, indicating a moderate level of dispersion in employees' perceptions about training programs. The low level of satisfaction (range of 11 to 17) was found to represent 27.8% of the respondents (n = 17), indicating that a substantial number of employees perceive training programs to be of low quality or relevance to meeting the needs of agricultural extension workers. However, the medium level of satisfaction (range of 19 to 26) was found to represent the highest percentage of the respondents (n = 35; 57.3%), indicating that the training programs are meeting the needs of employees to a moderate level. This implies that the training programs are adequate to meet the needs of the employees. The high level of satisfaction (above 27) was found to represent only 14.9% (n = 9) of the respondents, indicating that a small percentage of the employees perceive training programs to be meeting their needs to a high level.

Table 6. Distribution of Agricultural Extension Workers According to Satisfaction with Training Programs

Satisfaction Category	Score Range	Frequency (n)	Percentage (%)	Mean Score
Low	11–17	17	27.8	15.53
Medium	19–26	35	57.3	22.78
High	≥ 27	9	14.9	28.38
Total	—	**61**	**100**	—

Third Objective: Evaluation of the Performance Level of Agricultural Extension Workers in Kirkuk Governorate

From Table 7, it is evident that the general performance level of agricultural extension workers is characterized by a mean value of 49.86 with a standard deviation of 3.78. The distribution shows that

11.47% (n = 7) of the population falls within the low-performance level (28-41), while 65.57% (n = 40) of the population is distributed around the medium-performance level (42-55), and 22.95% (n = 14) within the high-performance level (56-70).

This shows that most agricultural extension workers exhibit high to moderate levels of performance, which is a manifestation of efficiency in performing extension duties. This is attributed to various factors that influence efficiency, including on-the-job training and institutional commitment to efficiency, but not to age, educational level, or academic major. This is also evident from the correlation analysis, which shows no strong significant relationships between most demographic characteristics and performance level, apart from a minimal effect of rural upbringing on efficiency.

Table 7. Distribution of Agricultural Extension Workers in Kirkuk Governorate According to Performance Level and Its Relationship with Job Satisfaction

Performance Category	Score Range	Frequency (n)	Percentage (%)	Mean Score	Correlation with Job Satisfaction (R.S)
Low	28–41	7	11.47	33.71	0.297*
Medium	42–55	40	65.57	49.60	
High	56–70	14	22.95	57.88	
Total	—	**61**	**100**	—	

Fourth Objective: Correlation between job satisfaction and independent variables such as age, gender, education, years of experience, specialization, upbringing, and training participation

1. Age

Table 8 shows the range of ages of the agricultural extension workers, which ranged between 25 and 65 years old. The range method was used in classifying the workers according to their ages, where the workers aged between 25 and 38 years formed the greatest proportion at 57.37%, followed by the workers aged between 39 and 52 years, who formed 29.50%, while the workers aged 53 years and above formed 13.11%. On the other hand, the means of the performance scores of the workers aged between 25 and 38, between 39 and 52, and aged 53 years and above were 48.88, 51.05, and 51.50, respectively, while the means of the job satisfaction scores of the workers in the same groups were 85.65, 87.05, and 86.75, respectively. The result shows that the performance and job satisfaction scores of the workers in the different groups converged.

Pearson correlation analysis revealed that the correlation between age and job satisfaction, as well as job performance, is not statistically significant, with correlation coefficients of 0.0018 and 0.118, respectively. From the result, it is evident that the age of the workers does not have an impact on job performance, nor does it have an impact on job satisfaction, possibly because the role of an agricultural extension worker is such that the organization does not consider the age of the workers in the determination of job performance, as the role of an agricultural extension worker is more focused on the competence of the workers than the age of the workers.

Table 8. Distribution of Respondents According to Age

Age Group (Years)	Frequency (n)	Percentage (%)	Mean Performance	Correlation	Mean Job Satisfaction	Correlation
25–38	35	57.37	48.88	0.118	85.65	0.0018
39–52	18	29.50	51.05		87.05	
≥ 53	8	13.11	51.50		86.75	
Total	**61**	**100**	—		—	

2. Gender

As shown in Table 9 below, the distribution of respondents according to gender indicates that there are more males (55.73%, n = 34) compared to females (44.27%, n = 27). Moreover, the mean performance score for male workers was found to be 52.38 compared to the mean performance score

for their female counterparts, which was found to be 46.96. This implies that there was a relative performance advantage for male workers compared to their female counterparts.

With regard to job satisfaction, the mean score for male workers was found to be 87.60 compared to the mean score for their female counterparts, which was found to be 84.57. This implies that there was only a slight difference between the gender groups. Moreover, the Pearson correlation coefficient was used to determine the relationship between gender and performance as well as between gender and job satisfaction. It was found that there was a significant positive relationship between gender and performance ($r = 0.34^*$, $p < 0.05$), implying that gender had an effect on performance in favor of male workers. On the other hand, no significant relationship was found between gender and job satisfaction ($r = 0.106$, $p > 0.05$), implying that job satisfaction was more closely related to general organizational factors that were not gender-dependent. This could be due to the nature of the work in the field, which may not favor women.

Table 9. Distribution of Agricultural Extension Workers According to Gender

Gender	Frequency (n)	Percentage (%)	Mean Performance	Correlation	Mean Job Satisfaction	Correlation
Male	34	55.73	52.38		87.60	
Female	27	44.27	46.96	0.34*	84.57	0.106
Total	61	100	—		—	

3. Educational Attainment

Table 10 shows the distribution of the sample by the highest level of education attained. It shows that the majority had a master's degree (42.62%, n = 26), followed by bachelor's degree holders (34.42%, n = 21), diploma holders (11.47%, n = 7), PhD holders (6.55%, n = 4), and secondary school certificate holders (4.91%, n = 3) out of the 61 sample respondents. There is an indication of an improvement in performance with the level of education, as shown by the means of 45.00 for secondary school, 46.85 for diploma, 50.19 for bachelor's, 50.11 for master's, and 55.50 for PhD holders. However, the differences in job satisfaction, as shown by the means, are relatively minor, at 87.66 for secondary school, 79.14 for diploma, 88.33 for bachelor's, 86.11 for master's, and 87.00 for PhD holders.

Using the Pearson correlation, the study found that there is no significant relationship between the level of education attained and job performance ($r = 0.226$) or job satisfaction ($r = 0.054$), implying that education does not play an important role in the performance of the sample, although it is likely that the practical nature of the work in the field may have an impact, where the differences in education may have been minimized in the study.

Table 10. Distribution of Agricultural Extension Workers by Educational Attainment

Education Level	Frequency (n)	Percentage (%)	Mean Performance	Correlation	Mean Job Satisfaction	Correlation
Secondary School	3	4.91	45.00		87.66	
Diploma	7	11.47	46.85		79.14	
Bachelor's	21	34.42	50.19	0.226	88.33	0.054
Master's	26	42.62	50.11		86.11	
PhD	4	6.55	55.50		87.00	
Total	61	100	—		—	

4. Years of Experience in Extension Work

Table (11) shows that a majority of agricultural extension workers had low experience, defined as 1-11 years, which accounted for 72.13% (n = 44), while medium experience, defined as 12-22 years, accounted for 21.31% (n = 13), and high experience, defined as 23-33 years, accounted for only 6.55% (n = 4) of the total respondents, who were 61 in number. The mean performance scores for each group were 49.79 for low experience, 51.08 for medium experience, and 47.60 for high experience, showing a

small increase in performance with experience, but not a clear rising trend. The mean job satisfaction scores for each group were 84.38 for low experience, 94.58 for medium experience, and 51.08 for high experience, showing a considerable variation in job satisfaction among extension workers for each level of experience. The results of the Pearson correlation coefficient revealed that there was no significant correlation between years of experience and extension performance (r = 0.030), and between years of experience and job satisfaction (r = 0.064), indicating that years of experience had no significant effect on extension performance and job satisfaction, possibly because extension performance is a function of training, motivation, and support, rather than years of experience, and job satisfaction is more a function of the work environment than years of experience.

Table 11. Distribution of Agricultural Extension Workers by Years of Experience in Extension Work

Experience (Years)	Frequency (n)	Percentage (%)	Mean Performance	Correlation	Mean Job Satisfaction	Correlation
1–11 (Low)	44	72.13	49.79		84.38	
12–22 (Medium)	13	21.31	51.08		94.58	
23–33 (High)	4	6.55	47.60	0.030	51.08	0.064
Total	61	100	—		—	

5. Academic Specialization

From table 12, it is evident that most agricultural extension workers were non-specialists in extension (90.2%, n = 55), while a few were specialized in agricultural extension (9.8%, n = 6). The mean performance score for extension specialists was 52, while for non-specialists it was 49.78. The mean job satisfaction for specialists was 81, while for non-specialists it was 86.78. The Pearson correlation analysis revealed no significant relationship between specialization and performance (r = 0.034) and job satisfaction (r = -0.121), which indicated that academic specialization was not a factor for determining job performance and job satisfaction. It is also possible that job performance is not based on academic specialization but on actual field experience and in-service training. In addition, it is also possible that a few specialists (n = 6) might have affected the outcome of the study. These observations clearly indicated a need to enhance extension specialization within the extension system to improve efficiency in performance.

Table 12. Distribution of Agricultural Extension Workers by Academic Specialization

Specialization	Frequency (n)	Percentage (%)	Mean Performance	Correlation	Mean Job Satisfaction	Correlation
Extension	6	9.8	52.00		81.00	
Non-Extension	55	90.2	49.78	0.034	86.78	-0.121
Total	61	100	—		—	

6. Place of Upbringing (Rural \ Urban)

As presented in Table 13 above, the majority of the extension workers originated from urban areas (95.1%, n = 58), whereas a small number originated from rural areas (4.9%, n = 3). The average performance scores were found to be higher for rural-origin workers (60.0) compared to those who originated from urban areas (49.34). This indicates that there is a notable difference between the two groups in terms of performance. Conversely, the average job satisfaction scores were found to be higher for urban-origin workers (86.38) compared to rural-origin workers (83.0). This indicates that there is a minor difference between the two groups in terms of job satisfaction.

The Pearson correlation analysis revealed a positive correlation between origin and performance (r = 0.293; **p** < .01), whereas there was no correlation between origin and job satisfaction

(r = -0.051). This indicates that extension workers who originated from rural areas are more likely to have more experience in the fields compared to those who originated from urban areas. This would have a positive influence on their performance. Conversely, job satisfaction seems to be more influenced by factors such as incentives and the work environment compared to origin.

Table 13. Distribution of Agricultural Extension Workers by Origin

Upbringing	Frequency (n)	Percentage (%)	Mean Performance	correlation	Mean Job Satisfaction	correlation
Rural	3	4.9	60.00		83.00	
Urban	58	95.1	49.34	0.293**	86.38	-0.051
Total	61	100	—		—	

7. Participation in Training Courses

Table 14 shows that most of the agricultural extension workers participated in training courses (86.9%, n = 53), while 13.1% (n = 8) of the agricultural extension workers did not participate in training courses. The average performance score was 50.20 for those who participated and 47.62 for those who did not participate in training courses. The average job satisfaction was 86.35 for those who participated and 85.25 for those who did not participate in training courses. The difference between these groups was very small.

The result of the Pearson correlation analysis indicated that participation in training courses was not significantly related to performance (r = 0.111) and job satisfaction (r = 0.026). This indicates that participation in training courses was not a significant factor, and this could be due to the assumption that training enhances the capacity of extension workers to perform; however, this depends on other variables, among them the quality of training and the environment in which extension workers perform their duties. It could also be due to the fact that only 8 extension workers did not participate in training courses; this limited the ability to draw significant differences between the groups.

Table 14. Distribution of Agricultural Extension Workers by Participation in Training Courses

Participation	Frequency (n)	Percentage (%)	Mean Performance	correlation	Mean Job Satisfaction	correlation
Participant	53	86.9	50.20		86.35	
Non-Participant	8	13.1	47.62	0.111	85.25	0.026
Total	61	100	—		—	

Conclusions and Recommendations

Conclusions that may be drawn from the study are that the performance and job satisfaction of the agricultural extension system are more related to practical experience, professional competence, and the nature of the work than they are related to the demographic characteristics of the personnel, such as age, gender, and level of education. It is also observed that the background of the personnel is favorable in the field.

In view of the above conclusions, the following recommendations are made:

- Emphasis should be placed on the continuous training of personnel in the field, with special attention given to the practical application of skills, in order to improve professional competence.
- The personnel should be made more competent through projects in the field, in order to improve their decision-making capabilities.
- Efforts should be made to improve the organizational factors, such as the work environment, in order to improve job satisfaction.
- Scholarly specialization in agricultural extension should be encouraged in order to improve the theoretical knowledge of the personnel.
- Follow-up studies should be conducted with a wider sample in relation to the impact of the quality

of training courses on performance and job satisfaction.

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