

Job Burnout and Its Relationship with Some Demographic and Professional Variables in the Agricultural Directorate and its affiliated agricultural divisions of Nineveh governorate(2025)

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Abstract

The study aimed to identify the correlation between job burnout among agricultural employees and certain personal characteristics (educational qualification, distance between workplace and residence). It also aimed to identify the correlation between job burnout and professional characteristics (administrative assignment, years of service, and participation in decision-making). The study offered recommendations to reduce burnout and enhance employee efficiency, based on suggestions derived from the study sample's perspectives. A questionnaire was developed consisting of two parts: the first part covered independent variables, and the second part included items measuring burnout among agricultural employees. Data were collected through interviews and email. The sample included 186 randomly selected agricultural employees from the Nineveh Agricultural Directorate and its affiliated divisions, chosen according to Morgan's table. Statistical methods used included frequencies, percentages, weighted means, arithmetic means, standard deviation, range, and Chi-square test ,The Statistical Package for the Social Sciences (SPSS) was used to tabulate and analyze the collected data. The study showed statistically significant correlations between burnout levels and personal characteristics (educational qualification, distance to workplace), and professional characteristics (administrative assignment, years of service, participation in decision-making). Recommendations included enhancing financial and moral motivation, regulating work hours to reduce exhaustion, appointing qualified individuals in appropriate roles, fostering a positive work environment, and providing ongoing training opportunities that meet professional needs and workplace challenges.

Keywords: Job Burnout, Agricultural Directorate, Demographic and Professional Variables .

Introduction

Agricultural development depends on two basic elements: the material element and the human element. The material element includes all the various means, tools and supplies used in production processes, while the human element is represented by workers in the agricultural sector. Achieving agricultural development requires harmony and harmony between the human element and the material element. This is done by providing the human element with the

capabilities and skills necessary to use the best elements of the material element in the production process, and the Agricultural Extension Service is responsible for providing the human element with those skills and capabilities [11] Countries' interest in development was limited only to achieving economic growth and increasing national income, and over time the term development changed in accordance with the needs of society. It has now become more important to

pay attention to human development and its standards, as attention to human development focuses largely on the human being while investing in the human being. The human element has become a necessary condition for achieving development and prosperity and getting rid of the darkness of ignorance and backwardness, but this can only be achieved through developing the human factor. Providing him with more opportunities to develop his abilities, skills, and technical energy, and to participate and integrate into the development process. In order to achieve comprehensive development of society and sustainable development. [14].The organization must improve all its capabilities and invest its own resources, whether human or from its employees, who carry out its work and its necessary nature to help farmers help themselves and interact with them with their diverse personalities through many and varied roles, and at the same time they respond to administrative duties within the organization and meet renewed requirements. For extension workers as well as the agricultural extension organization to which they belong, the pressures resulting from these demands can lead to feelings of physical and emotional exhaustion Which usually leads to stress or what is called job burnout [15].Since agricultural extension is one of the professions of a humanitarian nature that requires skills in dealing with different categories of extension workers. [6].

Previous researches indicates that employees engaged in direct human interaction are more susceptible to job burnout due to continuous exposure to work stress, which adversely affects their behavior and psychological health. This manifests in fatigue, frustration, anxiety, and stress, along with a desire to quit. Eventually, such conditions may lead to psychological and occupational burnout [3]. As well as Sabti (2006) found that uncomfortable work environments requiring

constant energy and self-control to handle crowded clients contribute to burnout, negatively impacting individual performance and overall organizational productivity[12].

Al-Barbari (2016:37) defined burnout as a negative psychological condition resulting from job pressures and increasing workload, leading to poor performance, reduced motivation, and negative interactions.[2]

Agricultural extension services serve as a bridge between scientists, who seek to solve problems in agricultural practice through research, and farmers who confront these problems. By providing advice, training and support, extension services help apply research findings on the ground, contributing to improved agricultural productivity. [13].

Agricultural extension organizations, like other educational service providers, play a vital role in promoting agricultural, rural, economic, and social development. Extension agents are central to these organizations but face numerous challenges: wide agricultural areas under their supervision, limited transportation and communication tools, shortage of extension agents and educational materials, minimal technical and training support, low managerial and peer support, insufficient financial and moral rewards, unrealistic goals, limited participation in decision-making, and inadequate resources compared to needs .Studies show that agricultural extension services suffer from weaknesses in human resources management and development, which negatively affects the efficiency and effectiveness of these services. Improving human resource management and development is essential to enhance the performance of agricultural extension services[9]

Given that agricultural extension is a humanitarian profession requiring high interpersonal skills, coupled with economic and social challenges [6]. these pressures may

lead to burnout. Thus, protecting extension workers from burnout risks is essential.

Burnout negatively affects performance across various fields. Several studies highlight a statistically significant inverse relationship between burnout dimensions (emotional exhaustion, depersonalization, and reduced personal accomplishment) and job performance. For instance:

- Bakr (2022) found high burnout levels across all three dimensions among extension workers in Minia Governorate, Egypt. Four organizational causes (poor rewards, limited authority, workload, and unfairness) significantly explained 23.2% of total variance in burnout.[7]

- Bolarinwa & Oyeyinka (2015) identified a significant correlation ($p < 0.05$) between job

stress and burnout symptoms in agricultural extension employees.[8]

- Ahmad et al. (2004) showed that 86.4% of extension supervisors experienced moderate to high levels of burnout. Positive correlations were found between overall burnout and job stress, organizational loyalty, intent to leave, and personality type, while negative correlations existed with age, educational qualification, years in extension and supervisory roles, job satisfaction, and organizational climate.[1]

Due to the scarcity of similar studies in Iraq and particularly in Nineveh Governorate, this research aims to assess burnout levels and their relationship with personal and professional variables among agricultural extension workers.

Objectives

(administrative assignment, years of service, participation in decision-making).

3. To present recommendations to reduce burnout and enhance employee efficiency based on the sample's responses.

1. To determine the correlation between job burnout and personal characteristics (educational qualification, workplace-residence distance).

2. To determine the correlation between job burnout and professional characteristics

Materials and Methods

The study was conducted in the Agricultural Directorate and affiliated agricultural divisions in Nineveh, Iraq, targeting all 387 employees in 30 districts. A simple random sample of 186 employees representing 48% of the total. This study employed a structured questionnaire consisting of two main sections. The first section focused on independent variables related to participants' demographic and professional characteristics. The second section included the Maslach Burnout Inventory (MBI) in its adapted form, comprising 60 finalized items designed to measure the three core dimensions of occupational burnout: Emotional Exhaustion, Depersonalization and Work Relationship

Disorder, and Reduced Efficiency and Personal Accomplishment. Responses were recorded using a five-point Likert scale ranging from (1 = Very Rarely) to (5 = Always) Accordingly, honesty means "the validity of the method or tool to measure what is intended to be measured, or in other words the validity of the research tool in achieving the objectives of the study, and thus an increase in the level of confidence in the results reached by the researcher so that it can be moved from them to generalization".[4] .To measure stability, a fixed measure is a measure that gives the same results if the same thing is measured successively under the same conditions, that is, the measure does

not contradict itself, and psychological measures do not reach the accuracy of measuring various physical phenomena such as length, weight, and time.[5]

The original questionnaire consisted of 65 items and was reviewed for face and content validity by a panel of experts from the Departments of Agricultural Extension and Psychology at the University of Mosul. Based on their feedback, the final version included 60 items.

To assess reliability, Cronbach's Alpha was used, yielding the following coefficients :

Dimensions of Job burnout	Cronbach's alpha value
(Emotional Exhaustion)	0.955
(Depersonalization and Work	0.961

Results and Discussion

1. Relationship Between Job Burnout and Personal Characteristics :

(18) employees, representing a ratio of (9.7), and in the married category (159) employees, representing a ratio of (9.7).(85.5),The category of divorced (6) with a percentage of (3.2) and widowed (3) employees with a percentage of (1.6) of the total sample.

Relationship Disorder)	
(Reduced Efficiency and Personal Accomplishment)	0.853
(Overall Reliability)	0.969

In addition to expert review, criterion-related (concurrent) validity was established by examining correlations with external indicators of burnout, confirming the scale's validity.

Data were collected using a simple random sampling method and were analyzed using the SPSS statistical software package

• marital status

Table No.(1) shows the distribution of agricultural employees in the Nineveh Agriculture Directorate and its affiliated agricultural divisions according to the marital status variable, as we found that the number of employees in the single category represents

Table No.(1) shows the distribution of respondents according to the marital status variable and the results of analyzing the correlation between the marital status variable and the level of job burnout.

Rank	marital status	frequency	percentage	Calculated Chi-square Value	Tabulated Chi-square Value	Degrees of freedom
1	single	18	9,7	156.613	12.591	6
2	married	159	85.5			
3	divorced	6	3.2			
4	widowedd	3	1.6			
	Total	186	100.0			

Source: These are the results of an analysis using the spss statistical program

$$\bar{X} = 1.96$$

people and widows, despite their small number in the sample, may face various psychological pressures that affect their levels of burnout

• Workplace-Residence Distance:

Table (2) shows the distribution of agricultural employees of the Nineveh Agriculture Directorate and its affiliated agricultural divisions according to the variable of the distance of the workplace from the place of residence into three categories according to its actual extent. The lowest number of numbers expressed in the results reached (1) km and the highest number reached (84) km, and thus The length of the category was approximately (27), which assigned us the categories to near, medium and far As it became clear to us that (161) of the employees, with a percentage of (86.5), have their place of residence located in places relatively close to the place of work, 20 of the employees represent a percentage of (10.8) of the total number of employees, whose place of residence is located in relatively average places, and (5) Of the employees, representing a percentage of (2.7) of the total sample, their place of residence is located in places far from the place of work.

Table No.(2) shows the distribution of respondents according to the variable of the distance of the workplace from the place of residence and the results of the analysis of the correlation between the variable of the distance of the workplace from the place of residence and the level of job burnout.

Rank	Workplace-Residence Distance	Frequency	percentage	Calculated Chi-square Value	Tabular chi value	degree of freedom
1	Near 1-27	161	86.5	238.235	9.487	4
2	Moderate 28-54	20	10.8			
3	Far 55-81	5	2.7			
	Total	186	100.0			

Source: These are the results of an analysis using the spss statistical program

\bar{X} = 18,36

residence and the degree of job burnout among the agricultural employees of the Nineveh Agriculture Directorate and its affiliated agricultural divisions, the chi-square

Standard deviation=0,440

To identify the correlation between marital status and the degree of job burnout among agricultural employees of the Nineveh Agriculture Directorate and its affiliated agricultural divisions, The chi-square was used, as the results showed us that the value calculated for the statistical laboratory chi-square equal to (156,613) is greater than its tabular value at the level of (0.05). Thus, we will reject the null hypothesis H_0 , which states that there is no relationship between the two qualitative variables, and we accept the alternative hypothesis H_1 , and this indicates There is a correlation between them, which indicates that married people may be more vulnerable to job burnout Due to family obligations and the pressures of reconciling work and personal life, in contrast, single people may have a lower burnout level due to the lack of family responsibilities. Divorced

Standard deviation = 11,74

To identify the correlation between the distance of the workplace from the place of

may feel more psychologically comfortable, which reduces their degree of burnout.

2- Relationship Between Burnout and Professional Characteristics :

• Administrative Assignment:

Table (3) shows the distribution of agricultural employees of the Nineveh Agriculture Directorate and its affiliated agricultural divisions according to the variable of administrative assignment after dividing it into four categories, as it was found that the number of employees within the category assigned to manage a department amounts to (8) employees, representing a percentage of (4.3) of the number of employees. The total number of employees assigned to manage a division is (20) employees, representing a percentage of (10.8) of the total number of employees Assigned to manage a unit numbering (65) and representing a percentage of (34.9) of the total number of employees. non-assigned numbering (93) representing a percentage of (50.0) of the total sample.

Table No.(3) shows the distribution of respondents according to the administrative assignment variable and the results of the analysis of the correlation between the administrative assignment variable and the level of job burnout.

Rank	Administrative Assignment	Frequency	percentage	Calculated Chi-square Value	Tabular chi value	degree of freedom
1	Assigned to manage a department	8	4.3	100.839	12.591	6
2	Assigned to manage a division	20	10.8			
3	Assigned to manage a unit	65	34.9			
4	Not an assigned	93	50.0			
	Total	186	100.0			

Source: These are the results of an analysis using the spss statistical program

$\bar{X}=3,31$

null hypothesis H0, which states that there is no relationship between the two qualitative variables, and accept the alternative hypothesis H1, and this indicates that Employees with senior management positions (department management) may experience higher levels of burnout due to stress And RESPONSIBILITY. While administratively inexpensive employees may be less likely to

was used, as the results showed us that the value calculated for the statistical laboratory chi-square is equal to (228.325), much higher than the tabular value (94.487).) At a degree of freedom (4), Which indicates that there is a statistically significant relationship between the distance of the workplace and the level of job burnout at a significant level (0.05). Thus, we will reject the null hypothesis H0, which states that there is no relationship between the two qualitative variables, and accept the alternative hypothesis H1, Which indicates that employees who travel long distances to work may be more susceptible to fatigue compared to those who work near their place of residence, as increasing the distance between the workplace and the place of residence may increase levels of burnout due to: physical and psychological fatigue resulting from daily commuting and loss of time that can be used. To rest or engage in other activities and increase the feeling of imbalance between work and personal life. In contrast, employees who work close to home

Standard deviation=0,830

To identify the correlation between academic qualification and the degree of job burnout among agricultural employees of the Nineveh Agriculture Directorate and its affiliated divisions, The chi-square was used, as the results showed us that the value calculated for the statistical laboratory chi-square equal to (100,839) is greater than its tabular value at the level of (0.05). Thus, we will reject the

18.36) As for the boundaries of the upper and lower categories, they were determined based on the lowest value (1) and the highest value (31), numeric and expressive through the results of the study, and thus the categories were determined, as it was found that the number of employees whose period of service reached (1_7) years represents a percentage of (12,9) of The total number of employees, and the number of employees whose period of service reached (8_18) years, representing a percentage of (78,0) of the total number of employees, The number of employees whose period of service reached (19-31) years represents a percentage of (9.1) of the total sample.

Table No.(4) shows the distribution of respondents according to the variable of length of job service and the results of analyzing the correlation between the variable of length of job service and the level of job burnout.

Rank	Duration of job service	Frequency	percentage	Calculated Chi-square Value	Tabular chi value	degree of freedom
1	Short 1-7	24	12.9	167.065	9.487	4
2	Moderate 8-18	145	78.0			
3	Long 19-31	17	9.1			
	Total	186	100.0			

Source: These are the results of an analysis using the spss statistical program

$\bar{X}=12,94$

pressures. While new employees (those with short experience) may be more motivated, reducing burnout levels, they may face adjustment pressures early in their careers.

3- Participation in decision-making

Table (5) shows the distribution of agricultural employees of the Nineveh Agriculture Directorate and its affiliated agricultural divisions according to the variable of participation in decision-making, where the respondents were divided into three categories based on the theoretical range, where the lowest value according to the degree given to the alternatives was (7) and the highest value was (21), and thus it reached The length of the category is (5) The results showed that those who enjoy a high level of participation in decision-making represent 164 (86.1) of the total sample, while employees who have an average level constitute 20 employees (10.8), and those who have a low level of participation do not

burn out because they do not have significant administrative responsibilities.

2-Duration of job service

Table (4) shows the distribution of agricultural employees of the Nineveh Agriculture Directorate and its affiliated agricultural divisions according to the variable of length of job service after dividing it using the arithmetic mean and standard deviation into three categories. The arithmetic mean was added with the standard deviation first and then the standard deviation was subtracted from the arithmetic mean to determine the boundaries of the middle category, which It amounted to (8.84-

Standard deviation=4,85

To identify the correlation between academic qualification and the degree of job burnout among agricultural employees of the Nineveh Agriculture Directorate and its affiliated divisions, Chi-square was used, as the results showed us that the value calculated for the statistical laboratory, chi-square, equals (102,946), which is greater than its tabular value at the level of (0.05). Thus, we will reject the null hypothesis H_0 , which states that there is no relationship between the two qualitative variables, and accept the alternative hypothesis H_1 , and this indicates The largest percentage of the sample has long experience (more than 19 years) While the smallest percentage are those with short experience. The long period of work may lead to increased job burnout due to routine and accumulated pressures. However, this group has enough experience to deal with work

freedom to participate in decision-making.

exceed 2 employees. A ratio of (1.1), which indicates that most employees have relative

Table No.(5) shows the distribution of respondents according to the variable of participation in decision-making and the results of the analysis of the correlation between the variable of participation in decision-making and the level of job burnout.

Rank	participate in decision-making	Frequency	percentage	Calculated Chi-square Value	Tabular chi value	degree of freedom
1	low 7-11	2	1.1	257.070	9.487	4
2	medium 12-16	20	10.8			
3	high 17-21	164	88.1			
	Total	186	100.0			

Source: These are the results of an analysis using the spss statistical program

$\bar{X} = 18,79$

Standard deviation = 2,139

employees in Nineveh Governorate and its affiliated agricultural divisions. Table (6) shows the proposals that reduce the phenomenon of job burnout from their point of view. Most of the proposals that were repeated and agreed upon by most employees were collected and were as shown. In the following table:

Table (6) showed that the proposal (management motivating employees financially and morally in terms of letters of thanks and financial incentives based on performance or difficult circumstances that the agricultural employee may face) was the most frequent factor according to the employees' point of view at a rate of (29.57%) The reason for this may be due to the fact that the motivation factor, whether material or moral, is one of the most important factors that affect the job satisfaction of employees and renew their motivation to work and thus reduce the degree of job burnout, followed in second place by the proposal (regulating working and rest hours) At a rate of (17.74%), the reason for this may be that working relatively long hours may lead to psychological and job exhaustion and high levels of stress, which increases the risk of exposure to job burnout, which makes organizing work and rest hours one of the most frequent solutions for employees to regain their activity and performance. It came in third place in terms of the proposed frequency (employing the right person in the

To identify the correlation between participation in decision-making and the degree of job burnout among agricultural employees of the Nineveh Agriculture Directorate and its affiliated divisions,, The chi-square was used, as the results showed us that the value calculated for the statistical laboratory chi-square is equal to (250.70) and the tabular value (9,487) at a significance level of (0.05). Thus, we will reject the null hypothesis H_0 , which states that there is no relationship between the two qualitative variables, and accept the alternative hypothesis H_1 , and this indicates There is a correlation between them, which indicates that employees who actively participate in decision-making suffer to a degree Less job burnout than those whose participation is limited or weak . The more employees participate in decision-making, the lower their level of job burnout. A sense of control over the work environment and the ability to make decisions contribute to improving job satisfaction and reducing levels of psychological and physical fatigue. Employees who are not given an opportunity to participate in decisions may feel powerless and marginalized, leading to higher levels of job burnout.

Third goal: Identify proposals that reduce the phenomenon of job burnout from the respondents' point of view.

This goal was measured by asking an open question in the questionnaire to agricultural

stress levels. Which leads to job burnout in the end, so employees may see that appropriate employment reduces and increases professional pressures of their achievements and raises their job efficiency, thus reducing the chances of job burnout.

right place and according to specialization) with a percentage of (13.44).The reason for this may be that appointing employees to jobs that do not suit their specializations or skills leads them to inefficiency and lack of motivation and achievement, which raises

Table (6): Explains the factors that reduce the phenomenon of job burnout from the point of view of the respondents

Rank	Factors that reduce the phenomenon of job burnout from the point of view of the respondents	frequency	percentage
1	Management motivates employees financially and morally in terms of letters of thanks and financial incentives based on performance or difficult circumstances that the agricultural employee may face.	55	29.57
2	Organizing working and rest hours	33	17.74
3	Employing the right person in the right place, according to specialization	25	13,44
4	Involving employees in field fields and urging them to conduct research in the fields of agriculture	17	9.14
5	Diversity in agricultural work in terms of giving employees the opportunity to move between different tasks to kill boredom and routine	16	8.60
6	Create a positive atmosphere in the workplace away from stress	13	6.99
7	Participation in training courses inside and outside the country for development, occupational health and safety	9	4.84
8	Work to rotate positions every four years to streamline work.	7	3.76
9	Harmony, exchange of opinions and ideas, and continuous discussion between employees and decision makers	6	3.23
10	Apply modern activities, practices and technology that improve working conditions	5	2.69

program **SPSS** to determine the **frequency and percentage** of each recurring proposal. The analysis focused on identifying the most frequently mentioned suggestions among the participants and presenting them in a ranked table supported by descriptive statistical output.

Source : The data presented in Table (6) were derived from open-ended responses provided by the respondents. The researcher relied directly on the participants' own answers to identify and extract the most repeated suggestions related to reducing job burnout. These responses were then categorized, coded, and analyzed using the statistical

results and recommendations :

□ Impact of Personal Characteristics:

There is a statistically significant correlation between job burnout and personal characteristics such as academic qualification and the distance between the workplace and the employee's residence. These factors

appear to play a decisive role in influencing burnout levels among agricultural employees.

□ Influence of Professional Characteristics:

The study revealed significant correlations between job burnout and certain professional characteristics, including administrative assignments, length of job service, and involvement in decision-

making. This indicates that work-related factors contribute substantially to emotional exhaustion and reduced professional accomplishment.

□ **Job Burnout as a Multi-Dimensional Phenomenon:** The results suggest that job burnout is influenced by an interplay of multiple personal and professional variables, rather than a single cause, emphasizing the need for comprehensive organizational strategies to address it.

In light of these conclusions, the study recommends the following actions to address job burnout and promote employee well-being in the agricultural sector:

1. **Enhance both material and moral motivation** through regular incentives, recognition programs, and equitable reward systems to boost morale and performance.
2. **Organize and regulate working hours** to reduce physical and emotional fatigue, ensuring a healthier work-life balance.
3. **Assign employees to roles that align with their qualifications and**

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expertise, thus enhancing their sense of competence and job satisfaction.

4. **Foster a positive and supportive work environment** that values teamwork, mutual respect, and psychological safety.
5. **Empower employees to participate in decision-making processes**, which increases their sense of belonging, ownership, and commitment to organizational goals.
6. **Implement ongoing professional training and development programs** that are aligned with employees' needs and evolving agricultural challenges.
7. **Consider geographic distance in workforce distribution**, to minimize travel-related stress and enhance employee stability and punctuality.
8. **Reassess the distribution of administrative tasks** to ensure fairness and avoid overburdening certain employees without adequate support or compensation.

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