

## A standard study of the possibility of applying green human resources management at the Algerian University using the program SPSS

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### Abstract:

The study aims at the possibility of applying green human resources management to the Algerian university. The study concluded that indicated the largest percentage does not agree with the practices of green human resources management, due to the university's adoption of traditional methods of attracting, employing training and green compensation, however, with the outbreak of the Corona virus, Covid 19, and the application of the distance education policy, it has suggested the possibility of applying green human resources practices and there is a link between green employment analysis and green human resources management., there is a correlation between green polarization and the management of green human resources, there is a correlation between green training and the management of green human resources, and There is a correlation between green compensation and green human resources management.

**Keywords:** green human resource management, green recruitment practices, green training practices

**JELClassificationCodes :** M1 ; M5

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## **1. INTRODUCTION**

Green human resource management practices are concerned with working to create environmentally friendly human resources that contribute to raising efficiency to the highest levels, reducing costs to the lowest level, raising the qualifications of workers and searching for the best of them. Virtualization, recycling, remote work, online recruitment and training, and energy-efficient office spaces, as well as contributing to awareness among workers and community members through awareness of using natural resources more economically and encouraging environmentally friendly products, which required organizations to formulate resource policies and practices. Human resources, training individuals to raise awareness of the environment, and implementing laws related to environmental protection, the contribution of human resources management practices to this, which are intended as: green employment, green polarization, green training and green compensation, which makes the following problem posed.

The problem: To what extent can green human resource management practices be applied in the Algerian university?

Hypotheses:

- There is a correlation between green employment analysis and green human resource management.
- There is a correlation between green polarization and green human resource management.
- There is a correlation between green training and green human resource management.
- There is a correlation between green compensation and green human resource management

## **2. Literature Review:**

- Study (Tang, Ren & Jackson, 2017) entitled "Green human resource management research in emergence: A review and future directions": This study aimed to highlight the successive needs of companies and organizations of various activities and fields for green human resources. The qualitative theoretical method was used by reviewing many published literature, previous studies, research and scientific journals. The study reached several results represented in the most effective measure for detecting human resource management practices and their various effects on the actual performance of those companies.

- A study (Masri, 2016) entitled "Assessing Green Human Resources Management Practices In West Bank: An Exploratory Study": This study aimed to reveal and evaluate the extent to which green practices for human resource management (green polarization, training and green compensation) are applied in Palestinian industrial companies consisting of Three sectors (food, chemical and pharmaceutical industries) in the West Bank, where the exploratory approach was used,

interviews and questionnaires were used, and the study concluded that green practices are not widely applied in Palestinian industrial companies.

- A study (Arulrajah et al, 2015) entitled "Green Human Resource Management Practices": This study aimed to link the green practices of human resource management (green motivation, green performance evaluation, green discipline management, green employee relations, green job analysis and design, green compensation) on environmental performance. The study was conducted in Sri Lanka and relied on desk research. The study reached the most important results, the most important of which is the greening of employees, starting from the functional analysis and ending with employee relations by activating green practices for human resource management. The study recommended the preparation of all practices in human resources management, as it considered that green practices are the powerful tools in creating green behavior and trends for employees.

- A study (Ahmad, 2015) entitled "Green Human Management: Policies and Practices": This study aimed to introduce the green functions of human resource management (green polarization, green training and development, green health and safety, green compensation) and the environmental performance of organizations and environmental considerations such as damage industrial and chemical. The study relied on the systematic review of literature and its multiple sources to obtain data on studies related to the topic, and the study concluded that the effectiveness of processes and practices is written and that the green movement needs to preserve natural resources and pay attention to recycling and reduce the gap between what is done and what is hoped for.

- Study (Tang et al, 2017) entitled "Green human resource management practices: scale development and validity":

This study aimed to identify green human resource management practices and the extent of their application and powers, and to seek to develop a correct measure to measure green human resource management practices in contemporary business organizations. The researcher used the exploratory analytical approach and the confirmatory factor approach. To achieve the objectives of the study, the dimensions included employment, green selection, green training, green performance management, green wages and rewards, and green participation.

### **3. Green Human Resources:**

#### **3.1 The concept of green human resource management:**

Green HRM is the use of HRM policies to support the sustainable use of resources within organizations and, more usually helps the reasons of environment sustainability it as integrating the organization's environmental management with the objectives of human resource management practices such as recruitment, selection, training and development, performance management, evaluation and rewards (Deshwa,

2015). as environmentally friendly human resource management practices, which leads to better efficiency, lower cost and higher levels of employee engagement with their organizations, is most regularly used to refer to the concern of people management policies and practices towards the broader corporate environmental schedule.

The authors derived the six-item green HRM scale from the CSR HRM scale by (Shen, 2016) and the staff education element of environmental management system (EMS) scale from Hsiao One of the most important assets of an industrial company that can integrate all functions and activities together, to achieve the best positive performance that is reflected in the overall performance of companies.

A modern means that enables companies to use paperwork and advanced in order to implement green human resource management practices that include recruitment, selection, training, and performance evaluation, in order to create sustainable development for these companies and achieve competitive advantage through their competent employees, According to a recent review of the GHRM literature, several empirical studies have suggested the use of a set of GHRM practices (the so-called “GHRM package”), rather than individual practices, as a means of improving environmental performance (EP), through the dissemination of environmental principles and values within an organization (Kima, 2019).

### **3.2 Dimensions of the Green Human Resources Management Practice Package:**

#### **3.2.1 Green Employment:**

The awareness of job seekers of the environmental behavior of organizations has recently increased, and the importance of contemporary trends to preserve the environment has been emphasized. In the United States, there is a tendency and desire to work in organizations that preserve the environment and develop their career path, and the impact of the environmental issue on the process of Polarization in the UK, with data showing that graduates judge environmental performance and a company's reputation as a criterion for making job application decisions. Promoting ‘eco-intrapreneurs to add value to organization’s products and/or services with efficient utilization of existing financial, human and natural resources. Encourage the employees for involvement and participation in the social and ecological initiatives. Green suggestion schemes and problem shooting circles should be developed through employee involvement and participation. Companies will be developing green workplace which is environmentally sensitive, resource efficient and socially responsible (Deshwa, 2015)

The organization can demonstrate its commitment to sustainability and environmental preservation by adopting the virtual recruitment method, that is, it is possible to complete the recruitment requirements through electronic means of communication (Teixeira, 2016).

#### **3.2.2 Green Training and Participation:**

The vision and mission of the organization is a starting point for green training and development, where it begins to identify training needs according to the analysis and job design and at an early period that coincides with the new appointments and begins by introducing them to the environmental and social activities practiced by the organization and seeks to develop them through the workers and specialists in environmental and social affairs and ending with the managers. So green training and development includes everyone whose job is determined by tasks that reach their goals to the organization's environmental and social goals. It is defined that green training and development are based on improving knowledge, skills and abilities that contribute to preventing environmental degradation, teaching workers the meaning of environmental values, and training them to use tools that enable them to conserve energy, reduce waste and loss, and hone skills to provide the ability to deal and participate actively in solving Environmental problems and thus become an important part in achieving environmental outcomes (Rimi, 2016). Organizations in general must attract green talents and trends, such as environmental specialists, who in themselves become a trademark of the organization. The managers' energies and green orientations must be invested in creativity towards the message of polarization and work to activate it to gain the best. From candidates so that the organization's strategy, policies and environmental and social values are reflected in the recruitment letter. The organization should also work on automating green practices for human resources by activating the latest technological means, starting with online applications, conducting initial audio or video interviews, and using e-mail as a matter of effective environmental performance and preserving environmental resources by reducing paper waste and using ink and transportation for transportation. and access to the organization (Ali, 2017).

### **3.2.3 Green Performance Management and Compensation:**

Compensation and rewards is the main process of human resource management through which employees are rewarded for their performance, and these human resource practices are the strongest and best way that links together the interests of individuals with the interests of the organization. It was noted that incentives can affect the employee's interest in work to the maximum degree and motivate him to make maximum efforts on his part to achieve the goals of the organization (Ahuja, 2015). Compensation and rewards can be monetary through the allocation of cash, while non-cash incentives include sabbaticals, special leave and gifts for employees and their families. Prizes can be by highlighting the green contributions of employees through widespread publicity, including praise and appreciation for green efforts by the CEO. or upper management.

Organizations play an important role in developing compensation systems that link incentives, material and moral compensation, and environmental and social performance, and even innovate motivational methods and methods within their system, including proposals made by workers to improve environmental or social

performance, and conducting promotional competitions across distances between units and workers to extract the best performance (Kima, 2019).

#### **4. The standard study of the possibility of applying human resources management at the Algerian University**

This aspect is represented in the analysis of the questionnaire directed to the workers of the University of Sidi Bel Abbas, through the statistical packages program SPSS

##### **4.1 Validity of the tool:**

**First: internal consistency:**

**Table No. 01 represents the validity of the internal consistency**

Item No	Dimensions				Total green human resource management
	Green Recruitment Analysis	green polarization	green training	green compensation	
01	.693**	.385**	.388**	.496**	.572**
02	.610**	.397**	.491**	.371**	.547**
03	.649**	.547**	.533**	.497**	.649**
04	.685**	.456**	.231	.194	.460**
05	.585**	.399**	.136	.251	.401**
06	.597**	.529**	.295*	.231	.484**
07	.408**	.647**	.540**	.407**	.583**
08	.488**	.730**	.563**	.543**	.676**
09	.525**	.641**	.580**	.378**	.621**
10	.487**	.688**	.367*	.264	.527**
11	.566**	.766**	.500**	.331*	.632**
12	.488**	.761**	.610**	.575**	.707**
13	.457**	.570**	.676**	.538**	.653**
14	.587**	.731**	.839**	.667**	.823**
15	.371**	.481**	.731**	.587**	.632**
16	.364*	.476**	.800**	.656**	.668**

17	.403**	.550**	.726**	.515**	.640**
18	.198	.473**	.580**	.463**	.498**
19	.382**	.349*	.567**	.772**	.599**
20	.440**	.568**	.602**	.760**	.686**
21	.256	.223	.463**	.731**	.482**
22	.562**	.676**	.737**	.845**	.818**
23	.514**	.551**	.776**	.855**	.782**

Source: Prepared by researchers, based on SPSS outputs

(0,01=\*\*) \ (\* = 0.05)

It is noted from Table No. (01) that the correlation coefficients in the form between items, dimensions and the total degree of green human resources management ranged between (0.37, 0.84) and were statistically significant at the significance level of 0.01.

Whereas, the correlation coefficients in the questionnaire between the items, the axis, and the total score ranged between (0.29, 0.36) and were statistically significant at the significance level of 0.05. Therefore, the questionnaire has good internal consistency sincerity.

## Second: Discriminatory sincerity

Table No. (02) represents the validity of the discriminator.

Variables	the number	Arithmetic average	standard deviation	degree of freedom	value of	The level of confidence	Indication level
higher	13	71.61	8.50	24	11.56	0.036	0.05
minimum	13	37.92	6.18				

Source: Prepared by researchers, based on SPSS outputs

It is noted from Table No. (02) that the values of "t" were estimated at 11.56 and were statistically significant at the significance level of 0.05. As the arithmetic mean of the upper group was estimated at 71.61 and the lower group was estimated at 37.92.. This shows the difference between the two higher groups. The lower is in favor of the higher. Which indicates the ability of the questionnaire to distinguish between the two end groups (higher and lower), and it is an indication of a good discriminatory validity of the questionnaire.

### Third: Krumbach's Alpha stability

**Table No. (03) represents the stability of Krumbach's alpha variants**

variants	Alpha Krumbach
<b>Green Recruitment Analysis</b>	<b>0.798</b>
<b>green polarization</b>	<b>0.786</b>
<b>green training</b>	<b>0.781</b>
<b>green compensation</b>	<b>0.798</b>
<b>Total green human resource management</b>	<b>0.881</b>

**Source:** Prepared by researchers, based on SPSS outputs

It is noted from Table No. (03) that the Cronbach's alpha stability coefficient for the total score was 0.88 at the significance level of 0.01, and it was recorded at 0.79 in the green recruitment analysis, and it was recorded at 0.78 in the green polarization dimension, and it was recorded at 0.78 in the training dimension. Green, scored 0.79 in after the green compensation, and thus indicates good stability.

#### 4.2 The study sample:

Undoubtedly, there is a study of the sample from its various aspects, which are:

##### 4.2.1 age:

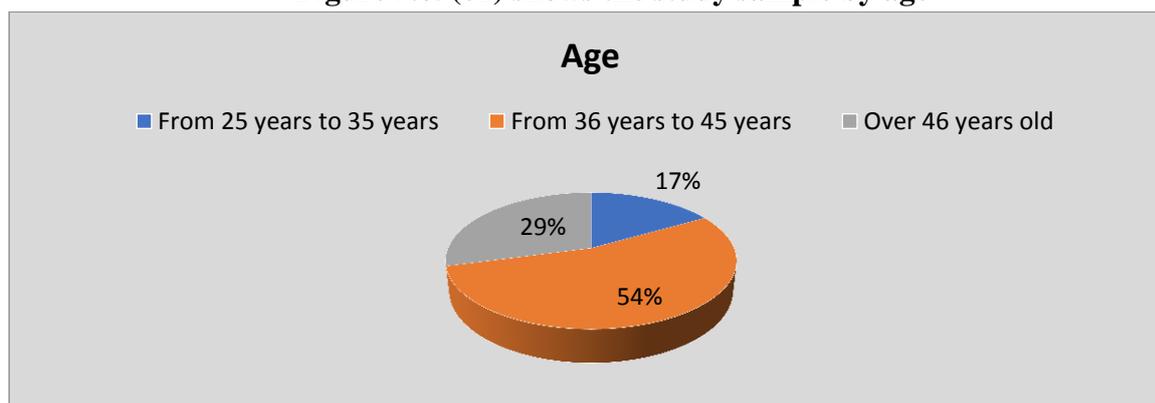
The following table shows the age groups of the study sample

**Table No. (04) of the study sample by age**

The study sample	age	repetitions	percentage
<b>Faculty of Economic and commercial sciences management workers</b>	<b>From 25 years to 35 years</b>	<b>8</b>	<b>%16.7</b>
	<b>From 36 years to 45 years</b>	<b>26</b>	<b>%54.2</b>
	<b>Over 46 years old</b>	<b>14</b>	<b>%29.2</b>
<b>the total</b>		<b>48</b>	<b>%100</b>

**Source:** Prepared by researchers, based on SPSS outputs

It is clear from the table that there are 08 workers whose age is estimated from 25 to 35 years at a rate of 16.7%, and for workers aged from 36 to 45 years, their number is 26, at a rate of 54.2%, and there are 14 workers with an age of more than 46 years at a rate of 29.2% of the study sample. The following figure shows that.

**Figure No. (01) shows the study sample by age**

**Source:** Prepared by researchers, based on EXCEL outputs

#### 4.2.2 Qualification:

After studying the age groups of the sample, it is necessary to study its academic qualification

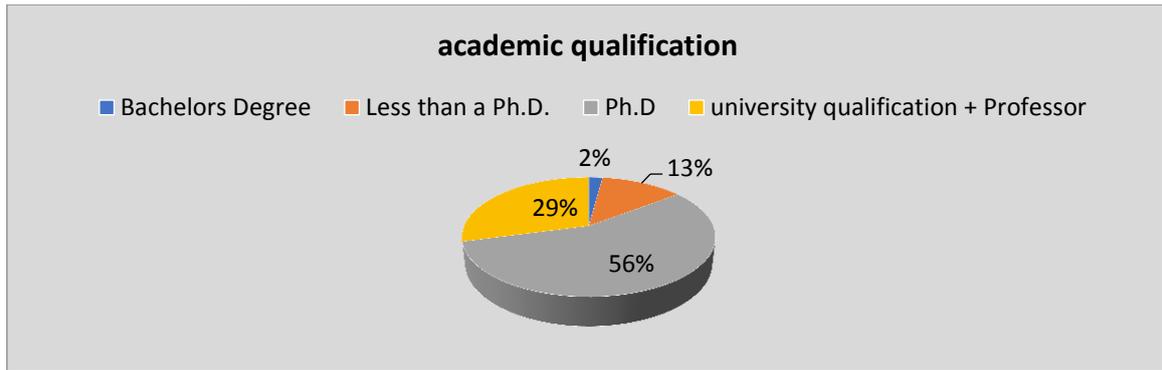
**Table No. (05) shows the study sample by academic qualification**

The study sample	academic qualification	repetitions	percentage
Faculty of Economic and commercial sciences management workers	Bachelors Degree	1	%2.1
	Less than a Ph.D.	6	%12.5
	Ph.D	27	%56.3
	university qualification + Professor	14	%29.2
	<b>the total</b>	<b>48</b>	<b>%100</b>

**Source:** Prepared by researchers, based on SPSS outputs

The table shows that there is one worker who has a bachelor's degree with a percentage of 2.1%, the number of those who have a qualification less than a doctorate is estimated at 06 by 12.5%, and the number of those who have a doctorate is estimated at 27 by 56.3%, and those who have graduate studies are estimated at 14 by 29.2 %, of the study sample, the following figure shows this.

**Figure No. (02) study sample by academic qualification**



Source: Prepared by researchers, based on EXCEL outputs

#### 4.2.3 Career Level:

The job level of the study sample categories will be estimated, and the following table shows that.

**Table No. (06) study sample by occupational level**

The study sample	Career Level	repetitions	percentage
Faculty of Economic and commercial sciences management workers	University Director	1	%2.1
	permanent teacher	43	%89.6
	temporary teacher	2	%4.2
	Administrative	2	%4.2
	<b>the total</b>	<b>48</b>	<b>%100</b>

Source: Prepared by researchers, based on SPSS outputs

The table shows that the study sample was mostly permanent professors, where their number was estimated at 43, at a rate of 89.6%, and temporary professors and administrative staff were estimated at 02, at a rate of 4.2% for each of them, and there was a dean among the sample with a rate of 2.1% of the study sample, the following figure illustrates this.

**Figure No. (03) study sample by occupational level**

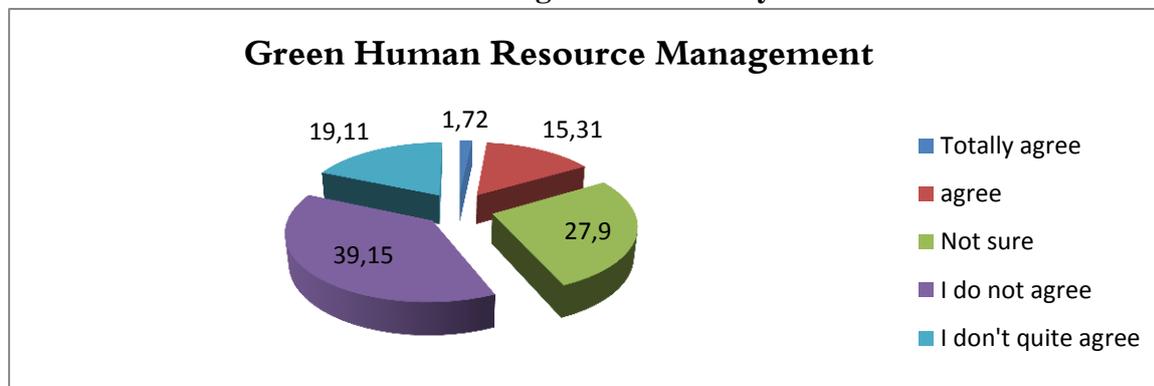


Source: Prepared by researchers, based on EXCEL outputs

#### 4.3 View and study the results:

Through the questionnaire that was answered by 149 workers in the Faculty of Economic, Commercial and Management Sciences, University of Sidi Bel Abbes, the results presented in the following figure.

**Figure No. (04): Results of the possibility of applying human resources management at the Algerian University**



**Source:** Prepared by researchers, based on EXCEL outputs

It is clear that the answers of the study sample were the majority of them tending to do not agree, as the answer rate was estimated at 39.15%, and the answer rate did not completely agree with 19.11%, and this indicates that the study sample was not in agreement with the management of green human resources, as the percentage The responses to agree were estimated at 15.31%, and fully agreed by 1.72%, and the percentage of those who were unsure was estimated at 27.90%. Therefore, the general trend of the form is not in agreement.

**Presenting the results of the first hypothesis:** which states that the analysis of green employment affected the management of green human resources

**Table No. (07) shows the correlation coefficient between green employment analysis and green human resource management**

Green Recruitment Analysis					
green human resource management	correlation coefficient	The coefficient of determination	regression coefficient	The level of confidence	Indication level
	0.81	0.66	2.77	0.00	0.01

**Source:** Prepared by researchers, based on SPSS outputs

It is clear from Table No. (04) that there is a correlation between green employment analysis and green human resources management, at the significance level (0.01), where the value of the correlation coefficient was (0.81), and the coefficient of determination reached (0.66). , and the regression coefficient was estimated at (2.77), and since the confidence level (Sig) is equal to (0.00) and it is a

statistical function at the significance level (0.01), therefore, the analysis of green employment contributes significantly to the management of green human resources.

**Presenting the results of the second hypothesis:** which states that green polarization affected the management of green human resources

**Table No. (08) shows the correlation coefficient between green polarization and green human resource management**

		green polarization			
green human resource management	correlation coefficient	The coefficient of determination	regression coefficient	The level of confidence	Indication level
	0.88	0.78	3.07	0.00	0.01

**Source:** Prepared by researchers, based on SPSS outputs

It is clear from Table No. (08) that there is a correlation between green polarization and green human resources management, at the significance level (0.01), where the value of the correlation coefficient is (0.88), and the coefficient of determination is (0.78), And the regression coefficient was estimated at (3.07), and since the confidence level (Sig) is equal to (0.00), which is a statistical function at the significance level (0.01), and accordingly, the green polarization contributes significantly to the management of green human resources.

**Presenting the results of the third hypothesis:** which states that green training affected the management of green human resources

**Table No. (09) shows the correlation coefficient between green training and green human resource management**

		green training			
green human resource management	correlation coefficient	The coefficient of determination	regression coefficient	The level of confidence	Indication level
	0.89	0.80	2.98	0.00	0.01

**Source:** Prepared by researchers, based on SPSS outputs

It is clear from Table No. (09) that there is a correlation between green training and green human resources management, at the significance level (0.01), where the value of the correlation coefficient is (0.89), and the coefficient of determination is (0.80), And the regression coefficient was estimated at (2.98), and since the confidence level (Sig) is equal to (0.00), which is a statistical function at the significance level (0.01), and accordingly, green training contributes significantly to the management of green human resources.

**Presenting the results of the fourth hypothesis:** which states that green compensation affects the management of green human resources

**Table No. (10) the correlation coefficient between green compensation and green human resource management**

green compensation					
green human resource management	correlation coefficient	The coefficient of determination	regression coefficient	The level of confidence	Indication level
	0.84	0.71	3.05	0.00	0.01

**Source:** Prepared by researchers, based on SPSS outputs

It is clear from Table No. (10) that there is a correlation between green compensation and green human resources management, at the significance level (0.01), where the value of the correlation coefficient is (0.84), and the coefficient of determination is (0.71). And the regression coefficient was estimated at (3.05), and since the confidence level (Sig) is equal to (0.00), which is a statistical function at the significance level (0.01), and accordingly, the green compensation contributes significantly to the management of green human resources.

## 5. CONCLUSION

The management of green human resources has greatly contributed to achieving many advantages for the economic and public sectors in the world, due to its ability to reduce costs, achieve satisfaction among workers, in addition to the job commitment that contributed to increasing production and achieving sustainable development in the long term, in addition to improving competitiveness. Increasing overall performance, which made organizations seek to conduct an environmental audit, and thus change the organizational culture, which was positively reflected on the creation of innovations and creative competitions among workers, which made the organization move towards developing its work, and finding ways for excellence and innovation.

Therefore, this study sought to highlight the possibility of applying green human resources management to a sample of workers of the Faculty of Economics, Commercial and Management Sciences at the University of Sidi Bel Abbes, He indicated that the largest percentage does not agree with the practices of green human resources management, due to the university's adoption of traditional methods of attracting, employing training and green compensation, however, with the outbreak of the Corona virus, Covid 19, and the application of the distance education policy, it has suggested the possibility of applying green human resources practices, and the following set of results were reached:

- The analysis of green employment greatly contributes to the management of green human resources, because there is a correlation between the analysis of green employment and the management of green human resources, at the significance level

(0.01), where the value of the correlation coefficient was (0.81), and the coefficient of determination reached (0.66), and the regression coefficient was estimated at (2.77), and since the confidence level (Sig) is equal to (0.00), it is statistically significant at the significance level (0.01).

- Green polarization contributes greatly to the management of green human resources. This is because there is a correlation between green polarization and green human resource management, at the significance level (0.01), where the value of the correlation coefficient was (0.88), and the coefficient of determination reached (0, 78), and the regression coefficient was estimated at (3.07), and since the confidence level (Sig) is equal to (0.00), it is statistically significant at the significance level (0.01).

- Green training contributes greatly to the management of green human resources, because there is a link between green training and green human resources management, at the significance level (0.01), where the value of the correlation coefficient was (0.89), and the coefficient of determination reached (0, 80), and the regression coefficient was estimated at (2.98), and since the confidence level (Sig) is equal to (0.00), it is statistically significant at the significance level (0.01).

- The green compensation contributes significantly to the management of green human resources, because there is a correlation between green compensation and the management of green human resources, at the significance level (0.01), where the value of the correlation coefficient reached (0.84), and the coefficient of determination reached (0, 71), and the regression coefficient was estimated at (3.05), since the confidence level (Sig) is equal to (0.00), which is statistically significant at the significance level (0.01).

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