


The Modified Effect of Using Environmental Technology on Green Accounting to Enhance the Effect on Sustainable Development



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ABSTRACT

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This study aimed to show the moderating effect of using environmental technology on enhancing the impact of green accounting on sustainable development. To achieve the study's objectives, the descriptive and analytical method was used by designing a questionnaire and distributing it to employees in the Jordanian Ministry of Local Administration. The multiple regression analysis was used to predict the effect of using environmental technology on enhancing the impact of green accounting on sustainable development. The study found a statistically significant positive effect of environmental technology on enhancing the impact of green accounting on sustainable development. The most important recommendation of the study is the continuation of the Jordanian Ministry of Local Administration in improving procedures for applying green accounting and focusing on the new environmental technology to enhance sustainable development.

1. INTRODUCTION

Green accounting focuses on showing the expenses related to the environment, leading to the inclusion of the costs of depleting natural resources and consuming environmentally friendly goods, in addition to the presence of legislation and laws regulating companies' commitment to preserving environmental elements and reducing pollution of natural resources such as air, water, and soil, increasing the importance of green accounting as a means of preserving the environment and the availability of information on the environmental costs incurred by organizations in this field [1].

With the modern technological advancement in the era of globalization, there has been an increasing interest in friendly environmental technologies aimed at reducing the negative impact on the environment. The world as a whole is moving towards these technological advancements, such as using solar panels to replace traditional light bulbs and integrating them into production elements. If there is a suitable environment of air, water, or land, there are the prerequisites for achieving sustainable development, which seeks to develop communities, lands, cities, and all businesses that meet the needs of the present without compromising the ability of future generations to meet their need [2].

With the need to stop environmental degradation without compromising the developmental stage, and amid global competition to advance all sectors of the state, it is necessary to target development to increase the state's interest in its resources and preserve them from depletion. Improving and developing the current situation through assessment and

careful planning for the future, and investing all human and material resources in all aspects of economic, social, political, and humanitarian development, required managing natural resources and directing them towards changes and developments.

As a result of Jordan's and its government's commitment to achieving sustainable development, including the Ministry of Local Administration in Jordan and donor organizations supporting projects and initiatives that preserve the environment, reduce costs, and support institutional work aimed at stopping the depletion of natural resources, this study came to examine the various aspects of green accounting and its impact on sustaining sustainable development in the context of adopting related friendly environmentally technologies.

It is expected that this study will contribute to understanding the expected effect of using environmental technology on green accounting in enhancing sustainable development through the application of green accounting practices that help clarify the impact of environmental pollution and savings achieved when using less environmentally polluting equipment, in addition to disposing of industrial waste harmful to the environment by choosing appropriate methods that do not cause any harm or cause minimal harm. Also, preserving the protection of natural resources reducing the depletion of its resources, and providing assistance to social organizations that preserve the environment are among the goals of green accounting, as well as providing information that helps the responsible authorities in the Ministry of Local Administration to evaluate performance, take decisions, monitor, and prepare

reports related to the environment.

In view of the increasing global problems such as climate change, population growth, environmental pollution, improper use, and depletion of natural resources, countries need to use modern environmental technological techniques towards an economic activity that is less environmentally harmful and that preserves natural resources.

The most prominent problem facing the current era in the world, especially in the countries of the Middle East, including Jordan, is the environment and how to preserve it, improve dealing with it, not deplete its resources, and reduce its costs, in addition to finding alternative work methods and replacing them with what preserves the environment in the production process.

Assess the financial implications of implementing alternative methods and practices that reduce environmental costs by replacing old systems with green alternatives and environmentally friendly technological techniques. This should contribute to sustainable development, from environment, economic, and social dimensions.

This study aimed to demonstrate the modifying impact effect of the use of environmental technology on the relationship between green accounting and sustainable development from the environmental, economic and social dimensions as a case study in the Jordanian Ministry of Local Administration.

Thus, this study tries to answer the main question: Does environmental technology statistically affect green accounting in enhancing sustainable development?

This study came as a continuation of studies conducted in the field of green accounting and sustainable development due to the importance of the topic. In addition, a clear lack of studies that addressed the concept of environmental technology to enhance the impact of green accounting on sustainable development and its relatively recent nature, especially in developing countries such as Jordan.

2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Green accounting is an evolution and addition accounting information in the field of environmentally, and it helps to achieve the goals associated with all activities that have an environmental impact. Green accounting is defined as accounting that examines the environmental impact on costs and returns and the impact of its application and inclusion in the financial accounting system [3].

Shi et al. [4] confirmed the use of modern environmental technology for treatment of waste. This method aims to address the widespread issue of untreated waste, which poses a significant environmental problem globally, particularly in middle and low-income countries.

The study by Nguyen et al. [5] demonstrated that environmental technology, also known as green technology, promotes sustainable development. This involves identifying environmentally friendly resources for growth, developing new eco-friendly industries, creating jobs, and utilizing technologies to achieve green growth, all while preserving the environment and promoting sustainability.

Rounaghi [6] argued that sustainable development necessitates the exploration of cutting-edge modern technologies that promote a clean, green environment and bolster environmental protection. Therefore, it is crucial to

carefully consider each innovation stemming from environmental technology and analyze its influence on sustainable development.

Al-Sharqawi [7] pointed out that green accounting is a response to the use of new methods that analyze environmental costs and provide detailed information about those costs, especially since ignoring them may lead to misleading decisions for information users.

McGrath et al. [8] have shown a strong relationship between sustainable development and environmental accounting or green accounting. It also indicates that green accounting plays a role in this development through the information provided by the accounting system, which has taken a new dimension, the environmental dimension. This necessitates the inclusion of these costs in the published financial statements and their disclosure, to reflect the reality of these costs, which include information reflecting environmental impacts.

Rahman and Islam [9] confirmed that green accounting is the means through which the commitment of companies to environmental conservation can be assessed by providing information about the costs incurred in this field. It also emphasized the significant role of green accounting in achieving sustainable development in all its dimensions (economic, social, and environmental).

Khan and Gupta [10] highlighted the role of green accounting in achieving sustainable development by incorporating the environmental dimension into the broad concept of corporate activities; the study concluded that green accounting plays a role in achieving sustainable development.

Dura and Suharsono [11] revealed the impact of green accounting on sustainable development in Indonesia. The study found that green accounting has an effect on sustainable development, and it concluded that green accounting is an important indicator for companies to assess their long-term sustainability.

Riyadh et al. [12] identified the role of green accounting in improving the quality of accounting information and achieving sustainable development. The results confirmed that identifying environmental activities in Corporations contributed to improving the quality of accounting information, which had a positive impact on the quality of financial reports and achieving sustainable development in its economic, social, and environmental dimensions.

Manaa et al. [13] aimed to describe environmental accounting and identify the effect of environmental measurement and disclosure on sustainable development, both of which are integrally connected, the results concluded that green accounting seeks to achieve a balance between the environmental system and the economic system by rationalizing corporate decisions and directing them towards building an environmental management system that reduces the depletion of renewable environmental resources.

Ashari and Aggoro's [14] aimed to explain green accounting practices in public hospitals, and analyze the impact of green accounting practices and organizational size on business sustainability in public hospitals in Malang Raya. The study confirmed that green accounting practices affect business sustainability, while organizational size does not affect sustainability.

Bablu and Sarkar [15] aimed at investigating the impact of green accounting implementation on the sustainable development of highly polluting companies in Bangladesh, the study indicated a positive relationship between information quality, social responsibility, and the sustainable development

capabilities of highly polluting companies. It also confirmed that the relationship between green accounting implementation and sustainable development in highly polluting companies is a strong relation.

Gonzalez and Peña-Vinces [16] revealed the impact of environmental accounting as an accounting tool to enhance sustainable development in developing countries. The results confirmed the positive reasons for implementing green accounting in organizations to enhance sustainable development. The obstacles preventing companies from implementing green accounting lie in challenges related to the skills of applied environmental accounting and a lack of understanding of strengths and weaknesses in improving environmental accounting.

Through reviewing the theoretical literature of the study and highlighting studies that addressed the study variables; the current study seeks to test the following hypotheses:

There is a significant effect at ($\alpha \leq 0.05$) of green accounting on enhancing sustainable development.

There is a significant modified effect at ($\alpha \leq 0.05$) of the environmental technology on enhancing the impact of green accounting on sustainable development.

The hypotheses of the study can be illustrated in the study model as follow Figure 1:

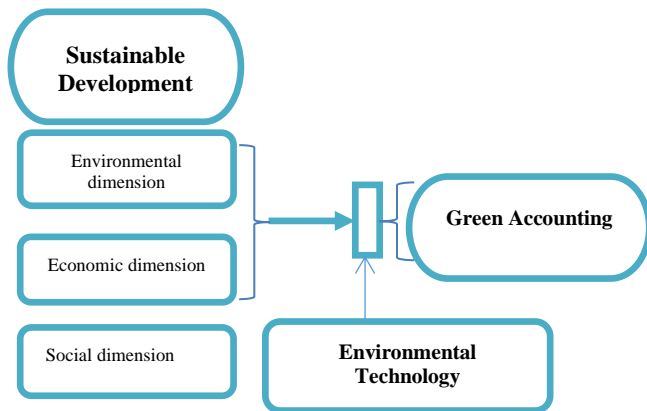


Figure 1. Study model
Source: The Authors

3. STUDY METHODOLOGY

The study used a descriptive approach to describe the general information of the study sample by converting non-quantitative data into measurable quantitative data, through the development of a questionnaire that is consistent with the study hypotheses, which was distributed to the study sample in the first 3 months of 2023.

3.1 Study population

The study population consists of employees in the Jordanian Ministry of Local Administration, numbering (180) according to data obtained from the Ministry's Human Resources Department. It was found that 40 employees were transferred to other ministries, leaving 140 employees as the study population. According to the table by Krejcie and Morgan [17], a statistically representative study sample would consist of 103 employees. A total of 124 questionnaires were distributed using simple random sampling, and 116 were returned, 8 questionnaires were excluded from the analysis, resulting in

108 questionnaires being used for statistical analysis.

The Jordanian Ministry of Local Administration was selected for this study because it encompasses 100 municipalities, with 20 joint services councils and 12 affiliated directorates. Each municipality includes a development unit director from the Ministry of Local Administration, and each directorate has a head of the hygiene and solid waste department responsible for sorting and managing waste. Also the Ministry of Local Administration serves as the main authority for local administrations in the Hashemite Kingdom of Jordan. It aims to promote comprehensive and sustainable local development by empowering local administrations, fostering cooperation between them, and establishing an efficient and supportive legislative, regulatory, and supervisory framework for their operations.

3.2 Study instrument

The study relied on the design of a questionnaire that addressed all dimensions of the study that was constructed and depended on the questionnaire mentioned in previous studies to measure the study variables, which were proven to be reliable and credible. It relied on the five-point Likert scale, to analyze the questionnaire data.

The study instrument consisted of two parts, with the first part focusing on the demographic characteristics of the respondents to the study questions (educational qualifications, job title, experience years, and professional certifications if available). The second part is related to testing the hypotheses, which consisted of paragraphs expressing the viewpoint of employees in the Jordanian Ministry of Local Administration, and consisted of (3) areas: The first area: Green accounting, consists of (7) paragraphs. The second area is sustainable development, consisting of (24) paragraphs, distributed across three dimensions: including (8) paragraphs for each Sustainable development dimension (environmental, economic, social dimension), the third area is environmental technology, consisting of (8) paragraphs.

3.3 Variables operationalization definition

The study defined the variables of the study in order to measure them as follows:

Green accounting: is a type of accounting with a mission to measure the cost of various activities provided by the Ministry of Local Administration and their impact on natural resources. It evaluates all activities and programs that have an environmental impact and reflect positively on achieving sustainable development. In addition to utilizing modern cost analysis in order to provide specific information about the lowest costs, this data enables management to minimize the impact of external activities and other systems.

Environmental technology: also known as green or clean technology refers to the development of infrastructure that is in harmony with the environment. It involves the better utilization and natural maintenance of ecosystems and aims to mitigate the effects of human interventions, also encompasses electronic devices that can contribute to this development.

Sustainable development: can be measured by a state's ability to meet the basic needs of all its citizens and provide them with the opportunity to achieve a better life. This includes increasing productive potential, ensuring equal opportunities for all, developing land and cities, and preventing any waste of natural resources. It also involves

increasing the use of green alternatives in the consumption process and all businesses in order to meet their current needs without compromising the ability of future generations to meet their own needs. This requires a focus on achieving professional development and the development of three basic dimensions related to comprehensive social, economic and environmental dimensions.

3.4 Statistical methods

The survey data was entered into the Statistical Package for the Social Sciences (SPSS) software to process it and achieve the purpose of the study. Specifically, the following statistical methods were used: Pearson correlation coefficient to measure the relationship between each dimension and the total score of the study Instrument, Cronbach's Alpha to measure the stability of the paragraphs of each dimension of the study, and the overall reliability of the study Instrument. One-Sample T-Test was used to describe the study sample's opinions on study variables compared to the test mean of the Likert scale equal (3). Skewness and Kurtosis to test the normal distribution of the data, the Variance Inflation Factor (VIF) and Tolerance to ensure the absence of high multicollinearity between independent variables, simple linear regression to test the effect of independent variables (green accounting) on the dependent variable(sustainable development), and multiple linear regression to test the modified effect of environmental technology on the independent variable (green accounting) in enhancing the dependent variable (sustainable development).

3.5 Study instrument tests

The current study began by testing the apparent validity to ensure the questionnaire's suitability for data collection. The questionnaire was presented to experienced professionals, experts, and a group of university professors to judge its suitability as a data collection Instrument. Their suggestions regarding linguistic formulation and relevance to the specific dimension were taken into account, resulting in the final form of the questionnaire.

To measure the content validity of study dimensions and the degree of representation of the paragraphs of the instrument for each dimension of the study, it relied on the correlation coefficients between each paragraph of the dimensions in the questionnaire with the paragraph dimension belonging to it [18]. In addition to measuring the relationship between each dimension and the total score of the study instrument using the Pearson correlation coefficient, which was as follows:

Table 1. Pearson correlation coefficients

Dimension	Correlation Coefficient	Significance Level
Green accounting	85.8	0.00
Environmental dimension	90.3	0.00
Sustainable development	95.7	0.00
Economic dimension	95.3	0.00
Social dimension	97.4	0.00
Sustainable development	69.5	0.00
Environmental technology		

Table 1 shows that the content of each dimension of the survey belongs to the dimension that was set to be measured

at a significance level of less than 5%, indicating the validity of the study's instrument.

Cronbach's Alpha coefficient was used to ensure the stability of the survey as an instrument for collecting the necessary data for the current study. Its high value indicates a high degree of stability ranging from (0-1), and the statistically acceptable value is (70%) or more [19]. The results were as follows:

Table 2. Internal consistency reliability coefficients (Cronbach's alpha)

Dimension	Number of Paragraphs	Reliability Coefficient (Cronbach's Alpha) %
Green Accounting	7	92.6
Environmental Dimension	8	95.3
Sustainable Development	8	95.0
Economic Dimension	8	96.2
Social Dimension	8	98.2
Sustainable Development	24	97.1
Environmental Technology	8	98.1
Instrument as a whole	39	98.1

Table 2 shows that all the values of the Cronbach's alpha coefficient were statistically acceptable, and the stability of the study paragraphs as a whole was high, reaching (98.1%), indicating that the study instrument is reliable and can be measured. This also indicates the stability of the results when applied multiple times under similar conditions.

3.6 Description of the study sample

The study sample consisted of (108) employees in the Jordanian Ministry of Local Administration. To describe the characteristics of the study sample, the frequencies and percentages of personal variables for the individuals in the sample were calculated. The analysis showed that the study sample was distributed across all educational levels. About (83.7%) of the study sample (employees in the Jordanian Ministry of Local Administration) held a bachelor's degree, while the remaining percentage held diplomas, master's, and doctoral degrees. Additionally, about (87%) had at least five years of experience, indicate strengthens the results of this study. The highest percentage distribution of the sample individuals was 31.5% for the job title of Chief of Local Development Unit. The percentage distribution of individuals in the sample holding a professional certificate was 50.9%, indicating a high percentage and an indication of the availability of sufficient knowledge among the sample individuals about the study purpose, thus the possibility of relying on their answers to reach the desired results.

3.7 Analysis assumptions of linear regression

To apply linear regression analysis, it is necessary to ensure the availability of the basic assumptions of linear regression, which include the normal distribution of data and the absence of multicollinearity between independent variables in the case of multiple linear regressions.

- Normal distribution test

In regression analysis, it is necessary to ensure that the data follows a normal distribution. The Skewness and Kurtosis tests

have been used to confirm that the data is distributed normally. Table 3 shows the result of the normal distribution test for

the data, where the Skewness and Kurtosis test was used and the results were as follows:

Table 3. Skewness and Kurtosis statistics results

Dimension	Skewness	Standard Error	Kurtosis	Standard Error
Green Accounting	-1.045	.2330	0.048	0.4610
Environmental Dimension	-1.273	.2330	1.032	0.4610
Sustainable Development	-1.206	.2330	0.5150	0.4610
Economic Dimension	-1.131	.2330	0.3850	0.4610
Social Dimension	-1.395	.2330	1.618	0.4610
Environmental Technology	-1.395	.2330	1.618	0.4610

From Table 3, it is evident that the test value for Kurtosis falls between (1.96±) and the test value for skewness falls between (2.58±), thus the data distribution is subject to a normal distribution [20].

- Testing multicollinearity correlations

To test the multiple linear correlations between independent variables, the Variance Inflation Factor (VIF) and Tolerance were calculated. If the VIF value is less than 5 and the Tolerance is more than 20%, the result indicates the absence of a multicollinearity relationship [21].

Table 4 shows the VIF and Tolerance for the independent variables of the study and the interaction variable between the independent variable (green accounting) and the moderating variable (environmental technology), with the following results:

Table 4. Results of variance inflation factor and tolerance variance factor

Dimension	VIF	Tolerance
Green accounting	1.230	0.813
Environmental technology	1.873	0.534
Interaction between green accounting and environmental technology	1.636	0.611

Table 5. Test results for the single sample (T) test

Dimension	Mean	Standard Deviation	T-Value	Mean Difference	Significance
Green Accounting	3.72	0.85	8.79	0.72	0.00
Environment Dimension	3.63	0.98	6.70	0.63	0.00
Sustainable Development	3.73	1.00	7.65	0.73	0.00
Social Dimension	3.63	1.01	6.49	0.63	0.00
Environmental Technology	3.84	1.02	8.58	0.84	0.00

Referring to Table 5, the means of all study variables increased from the overall one sample (t) test mean value of (3), with statistically significant differences at a significance level of (0.05). This means that the study sample participants agree with the paragraphs of the study related to green accounting and sustainable development from the environmental, economic, and social perspectives, as well as environmental technology.

To demonstrate the strength and direction of the relationship between the study variables, Pearson correlation coefficients

The results shown in Table 4 indicate that the highest value of the Variance Inflation Factor (VIF) was 1.873, suggesting no multicollinearity between the independent variables. This is confirmed by the Tolerance value, which was as low as 0.534. Therefore, the results indicate no multicollinearity among the independent variables, as the VIF values are less than 5 and the Tolerance values are greater than 20%. Thus, the variance level in each independent variable is accepted [19].

4. STATISTICAL ANALYSIS RESULTS

This section presents the results of the data analysis of the study and the results of testing its hypotheses to achieve the study's objectives.

4.1 Description of the study sample characteristics

Arithmetic means, standard deviations, and the One Sample T-Test was calculated to determine the difference in the arithmetic mean of each variable from the assumed test mean of the Likert scale, which were (3). The results were as follows:

were used and are shown in Table 6.

To demonstrate the strength and direction of the relationship between study variables, it is clear from Table 6 that the correlation coefficients between the variables are statistically significant at a level of less than (0.01) and in the expected direction. The strongest relationship was between green accounting and sustainable development from an environmental perspective, with a correlation coefficient of (0.804). The correlation coefficient between environmental technology and green accounting was moderate at (0.432).

Table 6. Pearson correlation matrix between study variables

Dimension	1	2	3	4	5
Green accounting	1				
Environmental dimension	.804**0	1			
Sustainable development	.786**0	.873**0	1		
Economic dimension	.796**0	.876**0	.926**0	1	
Social dimension	.432**0	.401**0	.586**0	.559**0	1
Environmental technology					

** : Correlation is significant at the 1% level

4.2 Testing study hypothesis

The study relied on two main models to test the main study hypotheses, and the Ordinary Least Squares (OLS) method was used.

To test the study hypotheses, the first model was used through simple regression analysis to test the effect of green accounting on enhancing sustainable development, while the second model was used through multiple regressions to test the effect of the modified environmental technology variable on enhancing the effect of green accounting on sustainable development.

- Testing the first model:

The first main hypothesis states:

H0: There is a significant effect at ($\alpha \leq 0.05$) of green accounting on enhancing sustainable development.

To test the first main hypothesis, the following model was adopted:

$$SD = B_0 + B_1 GA + \varepsilon$$

SD: Sustainable development, B_0 : Constant, *GA*: Green accounting, ε : Random error, B_1 : Regression coefficient.

To test the effect of green accounting on sustainable development simple regression analysis was used and the results are shown in Table 7.

Table 7. Simple linear regression results

Independent Variable	β Value	T Value	Significant
Constant	0.189	0.799	0.426
Green accounting	0.935	15.074	0.000
Value F	227.231	significant (F)	0.000
R-Value	82.6%	R²	68.2%
Number of observation	108	Adj. R²	67.9%

Dependent Variable: Sustainable development

From Table 7, it is evident that there is an effect of green accounting on enhancing sustainable development in the Jordanian Ministry of Local Administration, where the value of t was (15.074) with a statistical significance level of (0.00). Therefore, the alternative hypothesis is accepted, which states:

"There is a significant effect at ($\alpha \leq 0.05$) of green accounting on enhancing sustainable development".

Based on the above analysis, the simple regression equation through which sustainable development values can be predicted through the green accounting variable is as follows:

$$SD = 0.189 + 0.935 (GA)$$

- Testing the second model:

The second Main hypothesis states:

H02: There is a significant modified effect at ($\alpha \leq 0.05$) of the Environmental technology on enhancing the impact of green accounting on sustainable development.

To test the second main hypothesis for predicting study variables, the following model was adopted:

$$SD = B_0 \pm B_1 GA \pm B_2 ET \pm B_3 GA * ET \pm \varepsilon$$

SD: Sustainable development, B_0 : Constant, *GA*: Green accounting, *ET*: Environmental technology, *GA*ET*: Interaction between green accounting and environmental technology, ε : Random error, B_{1-3} : Regression coefficient.

To test the effect of the modified environmental technology on enhancing the impact of green accounting on sustainable development multiple regression analyses were used and the results are shown in Table 8.

Table 8. Multiple regressions results

Independent Variable	β Value	T Value	Significant
Constant	-0.665	-2.312	0.023
Green accounting	0.826	13.179	0.000
Environmental technology	0.314	4.872	0.000
Interaction between green accounting and environmental technology	0.127	2.824	0.006
Value F	99.192	significant (F)	0.000
R-Value	86.1%	R²	74.1%
Number of observation	108	Adj. R²	73.4%

Dependent Variable: Sustainable development

From Table 8, it is evident that the modified effect of environmental technology on enhancing the effect of green accounting on sustainable development is a linear and statistically significant effect, with an F value of (99.192) and a significance level of less than (5%), indicating the importance of the model and its independent variables influencing significantly sustainable development. The Adj. R2 value reached (73.4%), indicating the explanatory power of both green accounting and environmental technology in interpreting sustainable development.

The T value for the effect of green accounting on sustainable development was (13.179) with a statistical significance level of (0.000), indicating that green accounting positively affects sustainable development at a significance level of less than 5%. Additionally, the T value for the effect of environmental technology on sustainable development was (4.872) with a statistical significance level of (0.000), indicating that environmental technology positively affects sustainable development at a significance level of less than 5%. It implicitly indicates the importance of the role played by both green accounting and environmental technology in enhancing sustainable development.

The T value for the interaction between green accounting and environmental technology was (2.824) with a statistical significance level of (0.006), indicating that the use of environmental technology positively affects green accounting in enhancing sustainable development at a significance level of less than 5%.

Therefore, we accept the alternative hypothesis, which states that "There is a significant modified effect at ($\alpha \leq 0.05$) of the Environmental technology on enhancing the effect of green accounting on sustainable development".

Therefore, the multiple regression equation through which sustainable development values can be predicted based on green accounting and environmental technology variables is as follows:

$$SD = -0.665 + 0.826(GA) + 0.314(ET) + 0.127(GA * ET)$$

Based on the results of the multiple regression analysis test for the second main hypothesis, Figure 2 shows that the moderating variable environmental technology, strengthens the positive effect between the independent variable (green accounting) and the dependent variable (sustainable development, and can be relied upon on form (2) as follows:

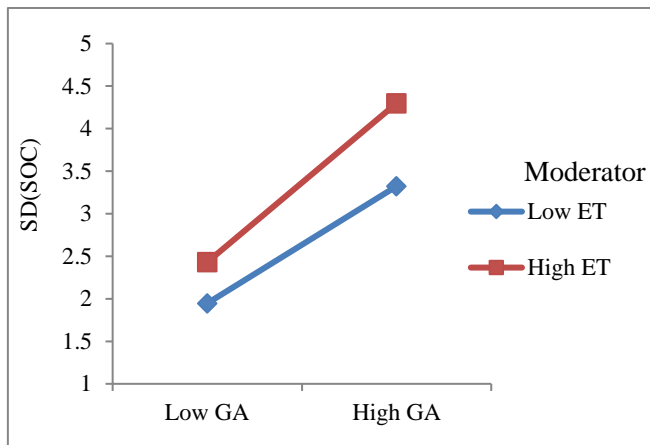


Figure 2. The effect of modified environmental technology on green accounting and sustainable development
Source: Prepared by the researchers for the outputs of multiple regression analysis

5. STUDY RESULTS AND CONCLUSIONS

After analyzing the study data and testing its hypotheses, the study reached the following important results:

- 1) The average responses of the study sample on the dimensions of green accounting and environmental technology came with a high average on the Likert scale, meaning that there is an application of green accounting and environmental technology in the Jordanian Ministry of Local Administration.
- 2) There is a positive impact of green accounting on sustainable development, meaning that the application of green accounting has a positive effect on sustainable development.
- 3) There is a statistically significant modified effect of environmental technology on enhancing the effect of green accounting on sustainable development represented by (environmental, economic, and social). Meaning that environmental technology plays a fundamental role in achieving sustainable development.

From reviewing the results of the current study, it can be concluded:

- 1) The reliance on modern technology techniques contributes to the implementation of green accounting, reducing natural resource depletion, preventing environmental degradation, and positively impacting sustainable development. Then failure to keep pace with technological replacement leads to an increase in local environmental problems, negatively impacting sustainable development.
- 2) Green accounting is considered a means to evaluate the commitment to environmental conservation by providing information about the costs incurred by relevant entities in the field of environment prevention.

Adopts technological replacement using environmental technology, such as discontinuing the use of old street lighting technologies and replacing them with energy-efficient and self-powered sunlighting units, and stopping resource depletion through solid waste sorting, and environmental degradation prevention, led to significant energy bill savings and controlled spending, positively impacting sustainable development, particularly in the economic aspect.

Disclosure of green accounting information demonstrates a commitment to environmental preservation and highlights the problems related to it that need to be treated within their priorities and seriousness, contributing to enhancing sustainable development.

6. STUDY RECOMMENDATIONS

In light of the study's results and conclusions, the study recommends the following:

- 1) Conducting studies to choose projects carried out by the Ministry of Local Administration before issuing approvals and commencing these projects, and seeking to increase these projects periodically to minimize environmental depletion as much as possible.
- 2) Searching for new methods to provide sufficient sources of funding to work on reclaiming desert lands to achieve sustainable development.
- 3) Adopting initiatives that aimed at managing solid waste, whether through the Ministry of Local Administration or through charitable organizations interested in establishing sorting and recycling projects.
- 4) Working on developing the accounting system in the Ministry of Local Administration that is suitable for modern environmental developments, including the requirements of green accounting.
- 5) Encouraging legislative bodies, issuing flexible and effective laws, implementing them fairly, and punishing anyone who does not comply with their implementation.

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