

THE ROLE OF SOCIAL AND ENVIRONMENTAL RESPONSIBILITY IN ENHANCING THE PERFORMANCE OF ALGERIAN PUBLIC INSTITUTIONS: A CASE STUDY OF THE MUNICIPALITY OF SKIKDA

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Abstract: This study investigates the contribution of social and environmental responsibility to improving the performance of public institutions. It adopts a descriptive approach alongside a case study, using a questionnaire distributed to a sample of 63 employees, determined via Herbert Arkin's formula. Data were analysed using SPSS (v25) to test the study's hypotheses.

The results revealed a statistically significant positive impact (at the 0.05 level) of the five dimensions of social and environmental responsibility (economic, legal, ethical, philanthropic, and environmental) on the performance of the Municipality of Skikda.

The study recommends implementing economic, social, and environmental standards to enhance institutional and societal performance, and encourages the adoption of ISO 26000 as a reference framework to strengthen responsibility and transparency in public institutions.

Keywords: Social and environmental responsibility; institutional performance; public institutions; Municipality of Skikda.

JEL Codes: H83, L31, M14, Q56.

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1. INTRODUCTION

In recent decades, the world has witnessed a significant increase in interest in the concepts of social and environmental responsibility, as they are considered fundamental pillars for achieving sustainable development and strengthening citizens' trust in institutions. Public institutions—especially municipalities—are no longer exempt from these global trends; rather, they are now expected to adopt responsible practices that reflect their commitment to both society and the surrounding environment.

In this context, the importance of examining the role of social and environmental responsibility in improving the performance of the Skikda municipality becomes evident. As an administrative unit that provides direct public services, the municipality interacts daily with the needs and expectations of citizens. This research aims to analyze the extent to which the municipality's commitment to the dimensions of social and environmental responsibility contributes to enhancing its performance, by assessing the impact of these dimensions on service quality, management effectiveness, and citizen satisfaction.

1.1.Statement of the Problem:

The problem of this study lies in identifying the role of social and environmental responsibility in improving the performance of public institutions. Accordingly, the main research problem can be formulated as follows:

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❖ What is the role of social and environmental responsibility in enhancing the performance of the Skikda municipality?

From this main problem, the following sub-questions are derived:

- To what extent does the economic dimension of social responsibility contribute to improving the performance of the Skikda municipality?
- To what extent does the legal dimension of social responsibility contribute to improving the performance of the Skikda municipality?
- To what extent does the ethical dimension of social responsibility contribute to improving the performance of the Skikda municipality?
- To what extent does the philanthropic dimension of social responsibility contribute to improving the performance of the Skikda municipality?
- To what extent does the environmental dimension of social responsibility contribute to improving the performance of the Skikda municipality?

1.2. Research Hypotheses:

To answer these questions, the following hypotheses have been formulated. The main hypothesis is:

- ❖ **Social and environmental responsibility has a statistically significant positive role (at the significance level $\alpha \leq 0.05$) in improving the performance of the Skikda municipality.**

This main hypothesis is supported by the following sub-hypotheses:

- The economic dimension has a statistically significant positive role ($\alpha \leq 0.05$) in improving the performance of the Skikda municipality;
- The legal dimension has a statistically significant positive role ($\alpha \leq 0.05$) in improving the performance of the Skikda municipality;
- The ethical dimension has a statistically significant positive role ($\alpha \leq 0.05$) in improving the performance of the Skikda municipality;
- The philanthropic dimension has a statistically significant positive role ($\alpha \leq 0.05$) in improving the performance of the Skikda municipality;
- The environmental dimension has a statistically significant positive role ($\alpha \leq 0.05$) in improving the performance of the Skikda municipality.

1.3. Objectives of the Study:

The study aims to achieve the following:

Main Objective:

- To explore all aspects related to social and environmental responsibility and its role in improving the performance of public institutions.

Specific Objectives:

- To examine the case of the Skikda municipality and the extent to which it adopts the dimensions of social and environmental responsibility;
- To identify and analyze various concepts related to social and environmental responsibility and performance, and explore the relationship between them;
- To arrive at a set of results and recommendations that could help improve the performance of public institutions in the future.

1.4. Significance of the Study

The significance of this topic lies in the following:

- It clarifies the concept of social responsibility as one of the modern tools of institutional self-regulation, especially for public institutions, helping them adapt, integrate, and improve performance;
- It addresses one of the most relevant and contemporary issues of recent years, as the adoption and implementation of social responsibility dimensions can have a positive impact both nationally and internationally.

1.5. Scope of the Study:

This study was conducted within the following boundaries:

Topical Scope: The research focuses on the role of social and environmental responsibility in enhancing the performance of public institutions.

Geographical Scope: The empirical investigation was applied to a public service institution, namely the Municipality of Skikda.

Temporal Scope: To adequately address the research problem and generate practical findings for validating or rejecting the hypotheses, the study covered the period from February 12, 2025, to May 12, 2025.

Human Scope: The fieldwork targeted a simple random sample of permanent employees, excluding contractual staff such as security guards and first-level technical workers. From a total population of 983 permanent employees, a sample of 63 respondents was selected using Herbert Arkin's formula for determining sample size.

2. THEORETICAL UNDERPINNING:

2.1. The Concept of Corporate Social and Environmental Responsibility- CSER: According to Hendrik Budi Untung (2008), Social and Environmental Responsibility reflects the commitment of companies and business sector to support sustainable economic development, This commitment involves integrating social responsibility into corporate strategies and ensuring a balanced focus on economic, social, and environmental dimensions. (Untang, 2008)

In this context, TJSP represents a manifestation of a company's responsibility toward both the social and environmental aspects of its surroundings, while still respecting its own

operational capacities. The implementation of Social and Environmental Responsibility initiatives should be guided by the needs and cultural values of the local communities where business activities are conducted. CSER is founded on the notion that companies bear responsibility not only to shareholders but also to consumers, employees, communities, and the environment, encompassing all aspects of their operations. Therefore, corporate decision-making should extend beyond mere financial considerations—such as profits or dividends—to include both immediate and long-term social and environmental impacts. (Mappong, 2023)

2.2. Dimensions of Corporate Social And Environmental Responsibility: CSER encompasses four main dimensions: Legal, Ethical, Economic, and Philanthropic, which can be presented through the following figure:



Figure 1: Pyramid of Global Corporate Social Responsibility and Performance

2.2.1. Economic dimension of CSER: The economic dimension of corporate social and environmental responsibility can be understood from two complementary perspectives. On one hand, it reflects the organization's duty toward the economic development of its surrounding environment, often demonstrated through contributions to the social economy sector—such as in-kind support, financial donations, sponsorships, and corporate volunteering. On the other hand, it encompasses the organization's internal responsibility to ensure financial sustainability by managing its resources effectively and securing its long-term viability. In today's world, where economic challenges are increasingly pressing, economic social responsibility has become essential. Organizations that embed CSR into their strategic planning tend to experience improved profitability, highlighting a positive correlation between social responsibility and medium-term financial performance. Furthermore, CSR activities contribute to building corporate value by strengthening community loyalty and trust, thereby attracting the interest of both internal and external stakeholders. Proper stakeholder identification and engagement within the CSR framework is therefore crucial to creating and demonstrating value. This is especially important for companies operating in the financial sector, where maintaining strong stakeholder relationships and meeting their expectations is key to achieving sustainable success. (Leon, Leon, & Quinones, 2022, p. 824)

2.2.2. Legal dimension of CSER: pertains to a company's adherence to laws and regulations enacted by governing authorities, which define standards for responsible conduct and reflect society's collective understanding of right and wrong. Legal frameworks are

established because society—including consumers, interest groups, competitors, and lawmakers—cannot always trust that businesses will act ethically on their own, especially in areas such as consumer rights or environmental protection. This uncertainty underscores the importance of legal accountability. Many ethical and economic concerns are ultimately addressed through judicial processes or legislative action. In essence, the legal aspect of CSR sets the boundaries for responsible corporate behavior through specific regulations, which include competition laws, consumer protection laws, environmental legislation, and laws that promote safety and equity. (Jucan & Jucan, 2010, p. 238)

2.2.3. Ethical dimension of CSER: Ethical responsibilities play a crucial role, particularly because legal frameworks are often insufficient to ensure responsible conduct. Companies and their executives place great value on maintaining a positive reputation and on adhering to ethical principles, or "doing the right thing". The continued publication of rankings such as Multinational Monitor's annual list of the "ten worst corporations" serves as a powerful incentive for executives to consider ethics not only as a moral concern but also as a practical necessity. Ethical responsibilities refer to actions and behaviors that society expects or condemns, even when such expectations are not formally embedded in legislation. These responsibilities reflect a broad array of norms, standards, and societal expectations shaped by what employees, consumers, investors, and the global community perceive as fair, equitable, and respectful of stakeholders' moral rights. Beyond the ethical expectations defined by the host country, there exists a deeper layer of moral obligations informed by foundational principles of moral philosophy—such as justice, individual rights, and utilitarianism—which further guide ethical corporate behavior. (Carroll, 2004, p. 117)

2.2.4. Philanthropic dimension of CSER: Philanthropic responsibilities may sometimes be driven by ethical motives, it is increasingly viewed today as a strategic activity, with businesses expected to play an active role in global corporate citizenship. As with legal and ethical responsibilities, philanthropic expectations vary significantly from one country to another. Therefore, wise executives are advised to carefully study the expectations of host countries in this regard. For example, during a presentation of this concept in Helsinki, Finland, I observed that Finns do not place high value on philanthropy, as their high-tax system is seen by the business community as sufficient to meet such citizenship-related expectations. (Carroll, 2004, pp. 117-118)

2.2.5. Environmental dimension of CSER: With the continuous developments the world has witnessed in recent times, an additional dimension has emerged beyond the traditional four, namely **environmental responsibility**. This dimension refers to addressing the environmental risks resulting from corporate activities. This goal can be achieved by adopting environmentally responsible behaviors aimed at protecting both the environment and society. Companies must commit to comprehensive and reliable environmental standards in order to provide environmentally friendly products and services, and strive to continuously improve their environmental performance.

2.3. Contribution of CSER Dimensions to Improving the Performance of Public Institutions: The economic dimension of CSER plays a pivotal role in improving the

performance of public institutions through the dimensions of the Balanced Scorecard. Financial performance is measured by the extent to which profitability is achieved and strategies are implemented, while the customer dimension reflects the level of customer satisfaction with products and services, which supports business continuity. The learning and growth dimension focuses on developing employees' skills and enhancing the ability to innovate and adapt to change. Meanwhile, the internal processes dimension is concerned with improving operational procedures to ensure efficiency and achieve customer and shareholder satisfaction alike. (Balaska, 2012, p. 30)

The legal dimension of CSER plays a pivotal role in enhancing the performance of public institutions through the dimensions of the Balanced Scorecard. On the financial level, it contributes to establishing laws that ensure shareholder compensation and promote profitability and sustainable growth. From the customer perspective, it emphasizes responding to clients' rights by providing high-quality products and services at reasonable prices, while ensuring their safety and satisfaction. In terms of learning and growth, the legal aspect supports building an organizational infrastructure that responds to contemporary challenges such as globalization, technological advancement, and social responsibility, focusing on the development of intellectual capital and career paths for employees. Finally, in the internal processes dimension, it promotes fairness in human resource management, recognizing employees as essential partners in institutional success. (Abd Elrahim, 2008, p. 531)

The ethical dimension of CSER plays a pivotal role in enhancing the performance of public institutions through the Balanced Scorecard dimensions. Financially, it contributes to achieving sustainable profitability without harming stakeholders, while focusing on offering new services that boost investment and quality of life. From the customer perspective, it obliges the organization to provide products that respect clients' values and their environment, thereby enhancing customer satisfaction and loyalty. In terms of learning and growth, it emphasizes developing employees' intellectual capacities and aligning their skills with their surroundings through programs that promote institutional excellence. Regarding internal processes, it fosters creativity and innovation while ensuring a supportive environment that considers employees' psychological and social well-being, thus strengthening their loyalty and supporting the implementation of institutional strategies. (Balaska, 2012, p. 33)

The philanthropic dimension of CSER plays a fundamental role in enhancing the performance of public institutions through the Balanced Scorecard dimensions. Financially, it contributes by tracking indicators such as revenues, donations, and cost-saving efforts to evaluate the financial impact of philanthropic activities. From the customer perspective, it focuses on improving the satisfaction of beneficiaries and partners by measuring their numbers and levels of satisfaction. In terms of internal processes, it emphasizes improving efficiency and service quality through metrics such as processing time, error rates, suggestions, and the implementation of new projects. In the learning and growth dimension, it aims to develop infrastructure and human capabilities through education, training, and participation in relevant conferences, thus supporting sustainable performance in the philanthropic sector. (Moussa, 2016, pp. 30-31)

The environmental dimension of CSER plays a pivotal role in enhancing the performance of public institutions through the Balanced Scorecard dimensions. Financially, it contributes to reducing operating costs and environmental liabilities by optimizing resource consumption, while opening new revenue opportunities such as recycling and investing in clean technologies. From the customer perspective, it boosts beneficiary satisfaction and trust by demonstrating a commitment to environmental responsibility and transparent communication. In the learning and growth dimension, it encourages training employees and developing their skills in environmental practices, fostering a culture of innovation and attracting talent seeking a responsible work environment. Regarding internal processes, integrating environmental considerations improves efficiency, enhances supply chain management, and promotes the adoption of eco-friendly technologies. (Lessak & Lessak, 2017, pp. 468-469)

3. METHODOLOGY

3.1. The sample and population of the study: In order to achieve the objectives of the study and to highlight the importance of social responsibility as well as assess its role in improving the performance of public institutions, it was necessary to conduct a field study on one of the public institutions. The Municipality of Skikda was selected for the application of the study's methodology and objectives, aiming to reach findings and recommendations that would benefit future generations. The study population consisted of the 983 employees of the Municipality of Skikda, distributed across various departments and directorates. This group was chosen due to its job stability, which facilitates their understanding of the questionnaire items and contributes to obtaining more accurate and realistic results.

To achieve the aims of the study, which are centered on identifying "the role of social and environmental responsibility in improving the performance of public institutions," a simple random sample of employees was adopted. The survey technique was used to determine the sample size by applying the **Herbert Arkin's formula** for sample calculation, as follows:

$$n = \frac{p(1-p)}{\left(\frac{E}{Z}\right)^2 + \frac{p(1-p)}{N}} \Leftrightarrow = \frac{0,5(1-0,5)}{\left(\frac{0,1}{1,64}\right)^2 + \frac{0,5(1-0,5)}{983}} \approx 63$$

Where:

n: The required sample size.

N: The population size.

P: The estimated proportion of the population that possesses the characteristic of interest. Since the exact value is unknown, it is commonly set at 0.5 to ensure maximum variability and meet sampling assumptions.

E: The acceptable margin of error, typically set at 0.1.

Z: The z-score corresponding to the desired confidence level. For a 90% confidence level (and a 10% significance level), the Z-value is 1.64.

Questionnaires were distributed to all members of the sample. A total of 60 paper-based questionnaires were retrieved, resulting in a response rate of 95.24%. Three questionnaires were

not returned, while five were excluded due to being invalid for analysis. Accordingly, the number of valid questionnaires eligible for statistical processing was 55, representing 87.30% of the total study sample. This percentage is considered acceptable for the purposes of scientific research. The number and percentages of distributed, retrieved, and valid questionnaires are presented in the following table:

Table 1: Overview of Questionnaire Distribution and Analysis Eligibility.

Distributed Questionnaires	Retrieved Questionnaires	Invalid and Unreturned Questionnaires	Valid Questionnaires
63	60	8	55
100%	95.24%	12.70%	87.30%

Source: Author's own work.

3.2. Normality Test: Before proceeding with the analysis of the questionnaire results, it is necessary to verify whether the data follow a normal distribution. The choice of appropriate statistical tests depends on the distribution of the sample. Therefore, we applied the Kolmogorov-Smirnov test. If the collected data follow a normal distribution, parametric tests are used; otherwise, non-parametric tests are applied.

Accordingly, the following hypotheses are formulated:

- **H₀:** The data do not follow a normal distribution if the significance level (Sig.) of the Kolmogorov-Smirnov test is less than or equal to 0.05.
- **H₁:** The data do follow a normal distribution if the significance level (Sig.) of the Kolmogorov-Smirnov test is greater than 0.05.

The following table summarizes the Z-score at a 95% confidence level with a significance level of 0.05:

Table 2: Normality Test for the Study Variables (Kolmogorov-Smirnov)

Kolmogorov-Smirnov		
Z-value	Sig.*	Test Result
0.897	0.397	Follows a normal distribution

Source: SPSS_v25-Generated Output.

The results of the normality test shown in the table above indicate that the Kolmogorov-Smirnov statistic is 0.897 for all study variables, with a significance level (Sig.) of 0.397. Since this value is greater than the threshold of 0.05, it is not statistically significant at the 5% level. Consequently, we reject the null hypothesis (H₀) and accept the alternative hypothesis (H₁), indicating that the data for the study variables follow a normal distribution. Therefore, parametric tests are appropriate for testing the study hypotheses.

3.3. Reliability and Validity of the Research Instrument: The validity and reliability of the questionnaire refer to its ability to achieve the intended objectives and its consistency when applied under similar conditions. A reliable and valid instrument produces consistent results and can be trusted in future studies. In this study, we assess these properties as follows:

3.3.1. Instrument Reliability: Reliability is one of the essential aspects of verifying the quality of a questionnaire. It reflects the tool's ability to produce consistent and dependable results. This includes how well the instrument maintains internal consistency, coherence, and stability when applied repeatedly under the same conditions. If the reliability coefficient exceeds 0.60 for the overall questionnaire and 0.70 for each dimension, it is considered acceptable.

To assess the reliability, we used Cronbach's Alpha coefficient, which ranges between 0 and 1, a value close to 1 indicates high reliability (perfect internal consistency), a value close to 0 indicates no reliability. The results are presented in the following table:

Table 3: Cronbach's Alpha Coefficients for the Study Variables.

Dimensions of CSER	Number of Items	Cronbach's Alpha
Economic dimension	08	0.811
Legal dimension	07	0.841
Ethical dimension	07	0.825
Philanthropic dimension	06	0.825
Environmental dimension	06	0.822
Total reliability coefficient for Dimensions of CSER	34	0.938
Total reliability coefficient for public institution performance	08	0.892
Overall reliability coefficient for all study variables	42	0.954

Source: SPSS_v25-Generated Output.

As shown in the table above, the Cronbach's Alpha values for all dimensions of social responsibility exceed the threshold of 0.70, confirming their reliability. The total reliability coefficient for the social responsibility axis is 0.938, and for the public institution performance axis, it is 0.892. Moreover, the overall reliability coefficient for the entire questionnaire reached 0.954, which significantly exceeds the minimum acceptable value of 0.60.

These results indicate that the instrument is highly reliable in terms of both dimensions and overall structure, making it suitable for use in the field study concerning the two main variables.

3.3.2. Internal Consistency Validity: Internal consistency validity measures how well each statement within a scale correlates with the overall dimension it belongs to. Here, we calculated Pearson correlation coefficients between each item and its respective dimension. A correlation is considered statistically significant when $\text{Sig} < 0.05$, indicating that the item reliably measures its intended construct. The analysis was performed using SPSS v25.

Table 4: Economic Dimension of CSER

N°	Statement	r	Sig
01	The organization follows a clear strategy to achieve short-term profits.	0.590**	0.000
02	Its adherence to agreements strengthens relations with customers.	0.528**	0.000
03	Offers training/internships to attract competent talent.	0.757**	0.000
04	Operates in an organized way to accomplish its goals.	0.744**	0.000
05	Increases revenues via planned investments without affecting wages.	0.694**	0.000
06	Acquires modern equipment to support decision-making.	0.714**	0.000
07	Educates employees to boost loyalty and satisfaction.	0.738**	0.000
08	Measures success by achieving financial targets.	0.451**	0.000
**	statistically significant at the significance level $\alpha = 0.01$		

Source: SPSS_v25-Generated Output.

Coefficients range from 0.451–0.757, all significant at $\alpha < 0.01$, confirming internal consistency for the economic dimension.

Table 5: Legal Dimension of CSER.

N°	Statement	r	Sig
01	Implements clear financial procedures to reduce ambiguity and losses.	0.630**	0.000
02	Fights corruption by providing periodic reports to oversight bodies.	0.747**	0.000
03	Establishes contract and procurement terms for better price, quality, and fraud control.	0.719**	0.000
04	Enforces mechanisms to protect assets and public resources.	0.794**	0.000
05	Designs regulations that address citizen rights.	0.639**	0.000
06	Upholds legal obligations to enhance employees' career progression.	0.801**	0.000
07	Organizes human resources systems to ensure fairness.	0.693**	0.000
**	statistically significant at the significance level $\alpha = 0.01$		

Source: SPSS_v25-Generated Output.

r-values 0.630–0.801, all significant at $\alpha < 0.01$, confirming validity of the legal dimension.

Table 6: Ethical Dimension of CSER.

N°	Statement	r	Sig
01	Pursues profit without harming stakeholders.	0.809**	0.000
02	Provides services ethically to satisfy customers.	0.821**	0.000
03	Adheres to ethical principles to prevent misuse of authority.	0.724**	0.000
04	Ensures fair training opportunities and a healthy work environment.	0.714**	0.000
05	Commits to ethics and reputation to attract top talent.	0.785**	0.000
06	Promotes integrity to reduce errors.	0.504**	0.000
07	Encourages ongoing learning and ethical accountability.	0.505**	0.000
**	statistically significant at the significance level $\alpha = 0.01$		

Source: SPSS_v25-Generated Output.

r-values 0.504–0.821, all significant at $\alpha < 0.01$, indicating strong internal consistency.

Table 7: Philanthropic Dimension of CSER.

N°	Statement	r	Sig
01	Contributes to community projects via revenues and donations.	0.663**	0.000
02	Provides assistance to employees in need.	0.737**	0.000
03	Hosts charitable events with clients to foster community ties.	0.673**	0.000
04	Increases participation in charity conferences and events.	0.873**	0.000
05	Encourages volunteerism among employees.	0.745**	0.000
06	Charity initiatives promote new skills among staff.	0.704**	0.000
**	statistically significant at the significance level $\alpha = 0.01$		

Source: SPSS_v25-Generated Output.

r-values 0.663–0.873, all $\alpha < 0.01$, confirming validity of the Philanthropic dimension.

Table 8: Environmental Dimension of CSER.

N°	Statement	r	Sig
01	Respects environmental laws to prevent degradation.	0.651**	0.000
02	Funds environmental awareness campaigns.	0.834**	0.000
03	Implements systems for waste management and recycling.	0.857**	0.000
04	Uses eco-friendly equipment and services.	0.720**	0.000
05	Hosts conferences on environmental protection.	0.705**	0.000
06	Collaborates with relevant stakeholders to maintain cleanliness.	0.593**	0.000
**	statistically significant at the significance level $\alpha = 0.01$		

Source: SPSS_v25-Generated Output.

r-values 0.593–0.857, all statistically significant at $\alpha < 0.01$, indicating strong internal consistency.

Table 9: Public Institution Performance.

N°	Statement	r	Sig
01	Focuses on delivering high-value-added services.	0.737**	0.000
02	Uses advanced financial systems to optimize spending.	0.774**	0.000
03	Conducts exploratory studies to understand client needs.	0.693**	0.000
04	Addresses complaints and delays through digitization and modern equipment.	0.744**	0.000
05	Maintains self-control systems across various administrative areas.	0.723**	0.000
06	Trains staff to retain expertise and improve productivity.	0.820**	0.000
07	Offers motivation systems to enhance service quality.	0.785**	0.000
08	Encourages innovation across employee categories.	0.798**	0.000
**	statistically significant at the significance level $\alpha = 0.01$		

Source: SPSS_v25-Generated Output.

Correlations range from 0.693–0.820, all $\alpha < 0.01$, confirming strong internal consistency for this scale.

All items across the CSER dimensions and public institution performance scale show statistically significant correlations ($\alpha < 0.01$), indicating high internal consistency. Thus, the instrument is reliable and valid for measuring both constructs.

4. FINDINGS AND DISCUSSION

Anchored in the central research problem that this study aims to address—namely, the role of social and environmental responsibility in enhancing the performance of the Skikda Municipality—this research seeks to empirically test the hypotheses associated with the two core dimensions: social responsibility and the performance of public institutions.

4.1. Testing the first sub-hypothesis: To achieve the objective of the study, this section will focus on testing the first sub-hypothesis, which states that: “The economic dimension has a statistically significant positive role at the 0.05 significance level ($\alpha \leq 0.05$) in enhancing the performance of the Skikda Municipality,” through the following:

a. Testing the Relationship between Variables: The Student's t-test is used to determine the nature of the relationship between the two variables. The associated Sig value is assessed and must be less than 0.05 to either accept or reject the hypothesis. The steps are:

- **Null Hypothesis (H_0):** The economic dimension has no statistically significant positive relationship at $\alpha \leq 0.05$ with the improvement of Skikda Municipality's performance.
- **Alternative Hypothesis (H_1):** The economic dimension has a statistically significant positive relationship at $\alpha \leq 0.05$ with the improvement of Skikda Municipality's performance.

Table 10: T-Test Result for the Economic Dimension's Relationship with Performance Improvement.

	T Value	Sig. Level
first sub-hypothesis	5.913	0.000

Source: SPSS_v25-Generated Output.

The table indicates a high t-value (5.913) with a significance level of 0.000, which is lower than 0.05. This confirms a statistically significant positive relationship between the economic dimension and performance improvement.

b. Testing Strength and Direction of Relationship: This step uses correlation and determination coefficients:

Table 11: Correlation and Determination Analysis.

	R Value	R ² Value	F Value	B Value
first sub-hypothesis	0.630	0.397	34.961	0.718

Source: SPSS_v25-Generated Output.

The results show a strong positive correlation ($R = 0.630$) and a determination coefficient ($R^2 = 0.397$), meaning that the economic dimension explains 39.7% of the variance in municipal performance. The remaining 60.3% is attributed to other variables not included in the model. The effect size ($B = 0.718$) and the F-value (34.961) confirm the statistical significance of the economic dimension.

Therefore, we reject the null hypothesis and accept the alternative hypothesis, concluding that the economic dimension has a statistically significant positive role in improving the performance of the Skikda Municipality.

4.2. Testing the Second Sub-Hypothesis: To achieve the study's objective, this section tests the second sub-hypothesis, which posits that the legal dimension has a statistically significant positive role at the 0.05 significance level ($\alpha \leq 0.05$) in enhancing the performance of the Skikda Municipality.

a. Testing the Relationship between Variables: We use the Student's t-test to evaluate the nature of the relationship between the legal dimension and municipal performance. The significance value (Sig.) must be less than 0.05 to reject or accept the hypothesis.

- **Null Hypothesis (H_0):** The legal dimension has no statistically significant positive relationship at $\alpha \leq 0.05$ with the improvement of Skikda Municipality's performance.

- **Alternative Hypothesis (H₁):** The legal dimension has a statistically significant positive relationship at $\alpha \leq 0.05$ with the improvement of Skikda Municipality's performance.

Table 12: T-Test Result for the Legal Dimension's Relationship with Performance Improvement.

	T Value	Sig. Level
Second sub-hypothesis	5.991	0.000

Source: SPSS_v25-Generated Output.

The t-value of 5.991 and a significance level of 0.000 indicate a strong, statistically significant positive relationship between the legal dimension and the performance of the Skikda Municipality.

b. Testing Strength and Direction of Relationship: We use correlation and determination coefficients:

Table 13: Correlation and Determination Analysis.

	R Value	R ² Value	F Value	B Value
Second sub-hypothesis	0.635	0.404	35.894	0.704

Source: SPSS_v25-Generated Output.

The table shows a strong positive correlation ($R = 0.635$), and a determination coefficient ($R^2 = 0.404$), indicating that the legal dimension explains 40.4% of the variation in municipal performance. The remaining 59.6% is due to other variables not included in the model. The effect size ($B = 0.704$) and F-value (35.894) confirm the legal dimension's statistically significant impact.

Consequently, we reject the null hypothesis and accept the alternative hypothesis, confirming that the legal dimension plays a statistically significant positive role in enhancing the performance of the Skikda Municipality.

4.3. Testing the Third Sub-Hypothesis: This section tests the third sub-hypothesis, which suggests that the ethical dimension has a statistically significant positive role at the 0.05 significance level ($\alpha \leq 0.05$) in enhancing the performance of the Skikda Municipality.

a. Testing the Relationship between Variables: We use the Student's t-test to evaluate the relationship between the ethical dimension and municipal performance. The Sig. value must be below 0.05 to confirm statistical significance.

- **Null Hypothesis (H₀):** The ethical dimension has no statistically significant positive relationship at $\alpha \leq 0.05$ with the improvement of Skikda Municipality's performance.
- **Alternative Hypothesis (H₁):** The ethical dimension has a statistically significant positive relationship at $\alpha \leq 0.05$ with the improvement of Skikda Municipality's performance.

Table 14: T-Test Result for the Ethical Dimension's Relationship with Performance Improvement.

	T Value	Sig. Level
Third sub-hypothesis	7.542	0.000

Source: SPSS_v25-Generated Output.

The high t-value (7.542) and a significance level of 0.000 indicate a strong and statistically significant positive relationship between the ethical dimension and the performance of the Skikda Municipality.

b. Testing Strength and Direction of Relationship: We use correlation and determination coefficients:

Table 15: Correlation and Determination Analysis.

	R Value	R ² Value	F Value	B Value
Third sub-hypothesis	0.719	0.518	56.876	0.793

Source: SPSS_v25-Generated Output.

The results reveal a strong positive correlation ($R = 0.719$) and a high determination coefficient ($R^2 = 0.518$), implying that the ethical dimension accounts for 51.8% of the variation in municipal performance. The remaining 48.2% is due to other unexplored factors. The coefficient $B = 0.793$ and F -value = 56.876 further support the significance of this impact.

Therefore, we reject the null hypothesis and accept the alternative hypothesis, concluding that the ethical dimension has a statistically significant positive role in enhancing the performance of the Skikda Municipality.

4.4. Testing the Fourth Sub-Hypothesis: In this section, the study examines the fourth sub-hypothesis, which states that the philanthropic dimension has a statistically significant positive role at the 0.05 significance level ($\alpha \leq 0.05$) in improving the performance of the Skikda Municipality.

a. Testing the Relationship between Variables: We use the Student's t-test to analyze the relationship between the philanthropic dimension and municipal performance. A Sig. value less than 0.05 is required to validate the hypothesis.

- **Null Hypothesis (H_0):** The philanthropic dimension has no statistically significant positive relationship at $\alpha \leq 0.05$ with the improvement of Skikda Municipality's performance.
- **Alternative Hypothesis (H_1):** The philanthropic dimension has a statistically significant positive relationship at $\alpha \leq 0.05$ with the improvement of Skikda Municipality's performance.

Table 16: T-Test Result for the Philanthropic Dimension's Relationship with Performance Improvement.

	T Value	Sig. Level
Fourth sub-hypothesis	9.467	0.000

Source: SPSS_v25-Generated Output.

The t-value (9.467) and Sig. level (0.000) strongly confirm a significant positive relationship between the philanthropic dimension and municipal performance.

b. Testing Strength and Direction of Relationship: We use correlation and determination coefficients:

Table 17: Correlation and Determination Analysis.

	R Value	R ² Value	F Value	B Value
Fourth sub-hypothesis	0.793	0.628	89.617	0.794

Source: SPSS_v25-Generated Output.

The results show a strong positive correlation ($R = 0.793$) and a high R^2 value (0.628), indicating that the philanthropic dimension explains 62.8% of the variation in performance. The rest (37.2%) is attributed to other factors outside the model. The coefficient $B = 0.794$ and the F-value = 89.617 confirm the significance of the impact.

Therefore, we reject the null hypothesis and accept the alternative hypothesis, confirming that the philanthropic dimension has a statistically significant positive effect on improving the performance of the Skikda Municipality.

4.5. Testing the Fifth Sub-Hypothesis: This section aims to test the fifth sub-hypothesis, which states that the environmental dimension has a statistically significant positive role at the 0.05 significance level ($\alpha \leq 0.05$) in enhancing the performance of the Skikda Municipality.

a. Testing the Relationship between Variables: The Student's t-test is employed to assess the relationship between the environmental dimension and municipal performance. A Sig. value below 0.05 indicates statistical significance.

- **Null Hypothesis (H_0):** The environmental dimension has no statistically significant positive relationship at $\alpha \leq 0.05$ with the improvement of Skikda Municipality's performance.
- **Alternative Hypothesis (H_1):** The environmental dimension has a statistically significant positive relationship at $\alpha \leq 0.05$ with the improvement of Skikda Municipality's performance.

Table 18: T-Test Result for the Environmental Dimension's Relationship with Performance Improvement.

	T Value	Sig. Level
Fifth sub-hypothesis	5.237	0.000

Source: SPSS_v25-Generated Output.

A high t-value of 5.237 and a significance level of 0.000 confirm the existence of a statistically significant positive relationship between the environmental dimension and performance.

b. Testing Strength and Direction of Relationship: We use correlation and determination coefficients:

Table 19: Correlation and Determination Analysis.

	R Value	R ² Value	F Value	B Value
Fifth sub-hypothesis	0.584	0.341	27.422	0.626

Source: SPSS_v25-Generated Output.

The results demonstrate a moderate positive correlation ($R = 0.584$) and a determination coefficient ($R^2 = 0.341$), suggesting that the environmental dimension accounts for 34.1% of

the variation in municipal performance. The remaining 65.9% is due to other variables not included in the model. The coefficient $B = 0.626$ and $F\text{-value} = 27.422$ confirm the statistical significance.

Therefore, we reject the null hypothesis and accept the alternative hypothesis, concluding that the environmental dimension has a statistically significant positive role in improving the performance of the Skikda Municipality.

4.6. Main Hypothesis Testing: To achieve the study's objective, this section tests the main hypothesis, which states: "Social responsibility has a statistically significant positive role at the significance level ($\alpha \leq 0.05$) in improving the performance of the Municipality of Skikda." This will be assessed through the following steps:

a. Testing the Relationship between the Two Variables: The relationship between the two variables is tested using multiple regression analysis, and the steps are as follows:

- Null Hypothesis (H_0): Social responsibility does not have a statistically significant positive relationship at the significance level ($\alpha \leq 0.05$) in improving the performance of the Municipality of Skikda.
- Alternative Hypothesis (H_1): Social responsibility has a statistically significant positive relationship at the significance level ($\alpha \leq 0.05$) in improving the performance of the Municipality of Skikda.

To determine the decision rule, we compute the T-value and the significance level as shown in the table below:

Table 20: T-Test Results for the Relationship Between Social Responsibility and the Performance of the Municipality of Skikda.

	T Value	Sig. Level
Main Hypothesis	8.378	0.000

Source: SPSS_v25-Generated Output.

As shown in the table above, the T-test result indicates a high T-value of 8.378, which supports the existence of a statistically significant positive relationship between social responsibility and the performance of the Municipality of Skikda, at a significance level of 0.000, which is less than 0.05.

b. Testing the Strength and Direction of the Relationship: The strength and direction of the relationship are assessed using the correlation coefficient and the coefficient of determination, as illustrated in the following table:

Table 21: Multiple Regression Analysis Results for the Relationship Between Social Responsibility and the Performance of the Municipality of Skikda

	R Value	R ² Value	F Value	B Value
Main Hypothesis	0.845	0.714	24.501	0.798

Source: SPSS_v25-Generated Output.

From the table above, we observe a strong positive correlation between social responsibility and the performance of the Municipality of Skikda, with a correlation coefficient (R) of 0.845 at a significance level of 0.000 (less than 0.05), and a coefficient of determination (R^2) of 0.714. This means that social responsibility explains 71.4% of the variations in the application of social responsibility due to changes in the performance level of the Municipality of Skikda, while the remaining 28.6% is attributed to other variables not included in the study model. Additionally, the B-value of 0.798 indicates that an increase in the level of social responsibility leads to an improvement in the performance of the Municipality of Skikda. The significance of this effect is confirmed by the F-value (24.501) and the T-value (8.378) (see Table 34), both at a significance level less than 0.05.

Therefore, based on the analysis of the nature, strength, and direction of the relationship, we conclude the following:

The null hypothesis is rejected, and the alternative hypothesis is accepted, which states:

“CSER has a statistically significant positive relationship at the significance level ($\alpha \leq 0.05$) in improving the performance of the Municipality of Skikda.”

5. IMPLICATION TO RESEARCH AND PRACTICE

This study offers several research implications that may guide future investigations in the field of social and environmental responsibility within public institutions:

- Enhancing the understanding of the relationship between social responsibility and the performance of public institutions;
- Opening new avenues for research on the dimensions of social responsibility within the Algerian context;
- Contributing to the adaptation of global concepts of social responsibility to the local context;
- Providing a preliminary database for future comparative studies;
- Confirming the need for more quantitative studies on the topic of social responsibility.

6. CONCLUSION

In light of the rapid global transformations, social and environmental responsibility in all its dimensions has become a pivotal factor in enhancing institutional performance, expanding the influence of organizations, and reinforcing their legitimacy. With the growing criticism directed at public institutions, particularly regarding their societal roles and accountability to stakeholders, these entities are increasingly expected to adopt a broader perspective on responsibility—one that integrates economic, legal, ethical, philanthropic, and environmental aspects. Such an approach not only contributes to fulfilling strategic objectives but also promotes social welfare and public trust.

Within this framework, the present study sought to examine the role of social and environmental responsibility in improving the performance of public institutions, using the Municipality of Skikda as a case study. A set of research questions and hypotheses were

formulated to investigate the extent to which the adoption of responsibility dimensions contributes to institutional performance. Based on the analysis of the questionnaire data and the statistical testing of the hypotheses, the results revealed a statistically significant relationship at the 0.05 significance level between the dimensions of social responsibility (economic, legal, ethical, philanthropic, and environmental) and the improvement of the municipality's performance.

These findings highlight the growing importance of integrating social and environmental responsibility into the governance of public institutions. They underscore the need to institutionalize a culture of responsibility within Algerian public administration as a strategic tool for enhancing performance, achieving sustainable development, and strengthening citizens' confidence in public services.

Recommendations

In light of the findings of this study, the following recommendations are proposed:

- Public institutions—particularly municipalities—should adopt a comprehensive strategy to integrate social and environmental responsibility into their operational and strategic planning;
- Greater emphasis should be placed on the economic, legal, ethical, philanthropic, and environmental dimensions of responsibility, as each plays a critical role in enhancing institutional performance;
- Awareness and training programs should be implemented to build a culture of responsibility among public employees and decision-makers;
- Performance evaluation frameworks in public administration should incorporate indicators related to social and environmental responsibility to ensure alignment with sustainable development goals;
- Regulatory bodies and policymakers are encouraged to develop legal and institutional mechanisms that promote and monitor the implementation of social and environmental responsibility in public sector organizations.

Recommendations for the Municipality of Skikda :

- The Skikda Municipality should strengthen its commitment to social and environmental responsibility by integrating it into local policies and development plans;
- A dedicated unit or committee should be established within the municipality to monitor and implement CSR and environmental initiatives;
- Transparency and communication with citizens should be enhanced regarding social and environmental activities to build mutual trust;
- A portion of the annual budget should be allocated to CSR and philanthropic projects that directly benefit the local community;
- Partnerships with civil society and the private sector should be reinforced to implement joint programs in sustainable development and environmental responsibility.

7. FUTURE RESEARCH

Based on the findings of this study, we propose the following topics for further research and academic enrichment:

- The impact of social responsibility dimensions on the competitive advantage of organizations ;
- The role of social responsibility in enhancing creative capacities;
- The effect of measuring social performance indicators on public institutions;
- Social responsibility in light of the institution's environmental orientation;
- Comparative performance measurement for improvement in economic institutions;
- The role of social responsibility in achieving competitive advantage.

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