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The Role of Social Responsibility Accounting in Achieving Sustainable Development: The Case of Major Industrial Groups in Algeria

Marouf Habib [1], **Chaouchi Kahina** [2], **Siouda Ines** [3], **Kedaifa Amina** [4] and **Grinat Mohammed** [5]

[1] Ahmed Ben Yahia Al-Wansharisi University, Faculty of Economic, Commercial and Management Sciences, Department of Financial and Accounting Sciences, Tissemsilt, Algeria, Email: marouf.habib@univ-tissemsilt.dz
[2] M'hamed Bougara Boumerdes University, Faculty of Economic, Commercial and Management Sciences, Department of Management Sciences, Algeria, Email: k.chaouchi@univ-boumerdes.dz
[3] M'hamed Bougara Boumerdes University, Faculty of Economic, Commercial and Management Sciences, Department of Management Sciences, Algeria, Email: i.siouda@univ-boumerdes.dz
[4] M'hamed Bougara Boumerdes University, Faculty of Economic, Commercial and Management Sciences, Department of Management Sciences, Algeria, Email: a.kedaifa@univ-boumerdes.dz
[5] M'hamed Bougara Boumerdes University, Faculty of Economic, Commercial and Management Sciences, Department of Management Sciences, Algeria, Email: m.grinat@univ-boumerdes.dz

Abstract---This study aims to examine the impact of social responsibility accounting on sustainable development in major industrial groups in Algeria. To achieve this objective, 125 questionnaires were distributed to a random sample of financial and accounting managers in large industrial units representing these groups and their branches. A total of 98 valid responses were obtained for analysis using the statistical software (SPSS.25), based on the descriptive analytical method and the inductive approach. The study found a statistically significant impact of social responsibility accounting when it comes to social accounting measurement, whereas no significant effect was found regarding the second dimension social accounting disclosure at a significance level of 0.05.

Keywords---Social responsibility, accounting, measurement, disclosure, sustainable development, Algeria.

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Introduction

Most societies, regardless of their level of development, strive to achieve positive progress in all fields that could improve their people's standard of living and ensure its continuity for future generations. This necessitates the establishment of comprehensive and sustainable development foundations. Sustainability has become one of the most important global concerns. Economic, social, and technological developments have transformed the world, prompting many countries to find themselves in need of preserving and developing their resources, while also protecting the environment to meet future needs. However, the application of sustainability principles is not limited to countries alone; it has also extended to business organizations, which must now prove themselves in a market filled with risks, changes, and competition.

Today, companies are required to balance their economic goals with social demands as a condition for achieving growth and ensuring their survival and sustainability. Companies also seek to contribute practically and effectively through their institutional social role in achieving sustainable development a concept that has shifted the company from an isolated internal system to a more interconnected and complex modern perspective. Likewise, the development of accounting, as an integral part of corporate management systems, has become one of the contemporary challenges for accounting professionals, especially in light of surrounding social and environmental changes. This has led to the emergence of social responsibility accounting, which enables the evaluation of corporate social performance and reflects the extent of their commitment to sustainable development plans.

From this standpoint, the present study seeks to answer the following main question: **"To what extent does social responsibility accounting in major industrial groups in Algeria contribute to achieving sustainable development?"**
As a preliminary answer to this research question, the following hypothesis was formulated: **"The application of social responsibility accounting in major industrial groups in Algeria positively affects the achievement of sustainable development."**

Section One: Social Responsibility Accounting and Sustainable Development

The Emergence and Definition of Social Responsibility Accounting (SRA):

It is agreed among many European researchers such as (Anderson, Linowess, Mobley) according to their writings (Nabou & Lwalbia, 2021, p. 247)، that the concept of Social Responsibility Accounting (SRA) emerged at the beginning of the 1960s, specifically in 1963, when it was considered one of the branches of accounting thought and science. In the United States, interest in this concept began after the formation of the American Institute of Certified Public Accountants (AAA), which established a committee responsible for addressing the measurement and disclosure issues related to corporate social responsibility accounting, during the 1970s (Mudhhi, 2017, p. 21).

The concept of Social Responsibility Accounting has seen several definitions, including the definition by the American Institute of Certified Public Accountants **(AICPA)**, which considers it as accounting that provides reports on the company's final results, including its economic performance, as well as its social and environmental responsibility. Undoubtedly, business operations (such as sales, purchases, etc.) are among the most important elements and functions within companies, affecting many stakeholders, including the community, customers, environment, and nature. Reporting on these impacts is one of the key issues in social responsibility accounting (Houa, 2021, p. 345).

The National Council of Accountants Committee defined it in three steps or elements: identification, monitoring, and reporting on the social or economic impacts resulting from a particular company's operations on society (Aqneiber, Abu Saif, & Abu Bakr, 2017, p. 06) . Al-Shirazi defined it as a set of activities and tasks aimed at measuring and analyzing the social performance of a particular accounting unit, and communicating the results of this analysis to concerned stakeholders, enabling them to make decisions and evaluate the social aspect of the project (Al-Shirazi, 1990, p. 341)

Mobley (1970) linked it to the behavior of the government and companies through the process of organizing, measuring, and analyzing the social and economic impacts resulting from their activities (Mobley, 1970, p. 762) **Linowess (1972)** described it as the integration of accounting within social sciences, represented in sociology, economics, and politics (Linowess, 1972, p. 33) . **Gray and Perks (1984)** defined it as the task of measuring and conveying information related to the welfare activities of workers, local communities, and the environment.(Choi & Mueller, 1984, p. 272)

The researcher believes that Social Responsibility Accounting is the accounting system concerned with evaluating corporate social performance, starting from measuring the social responsibility activities practiced by companies in the form of social benefits and costs, and communicating the results of these measurements to the public, users, beneficiaries, and other stakeholders.

The Concept of Social Costs:
The definition of the concept of social costs has varied between accountants, economists, and from the perspective of companies and society, which has led to the concept of social costs being divided into two categories or types. First, social costs are everything borne by society or any of its components and elements, including companies, in terms of sacrifices, burdens, expenses, and damages, whether these burdens are economic or not, resulting from a failure or socially irresponsible act, or a precautionary cost to avoid such actions. (Safir, Hamana, & Moulay, 2018, p. 05)

-From **the company's perspective (accounting view),** we face what is known as direct social costs when the company bears those sacrifices, whether voluntarily or by compulsion, to carry out and practice social activities in connection with its private business activities. However, these are not considered part of its primary or core business, such as making working conditions more favorable, increasing the welfare of the community, protecting the environment, satisfying customers, providing public services and facilities, and so on. It is not necessarily that this expenditure results in a direct economic benefit or income for the beneficiaries, and these costs are seen as actual costs from the company's side. (Al-Aleimat, 2010, p. 35)

-On the other hand, from **the community's perspective (economic view)**, we encounter what is known as indirect social costs when there are burdens and damages that society finds itself bearing and working to address due to the company's economic activities. These might include the company causing pollution to environmental components such as water, air, and soil, or excessive consumption of non-renewable natural energy sources (this is particularly evident in the case of multinational corporations), as well as generating noise and other similar issues. If the company does not take steps to repair or address these problems, according to this approach, it becomes a social cost to the community, a cost that could have been avoided, similar to an opportunity cost. (Tarchi & Yakhlef, 2017, p. 103)

Social Benefits (Returns):
After understanding the concept of social costs, it becomes easier to comprehend the meaning of social benefits. Social benefits are undoubtedly the total advantages received by society as a result of the company's activities, which it was established to undertake, along with its social initiatives, whether in economic or non-economic forms (Ben Al-Ayesh, 2018, pp. 45-46) ،. Whether the company benefits from this in return or not, and whether the return is equivalent in value or not (Abbas, 2016, p. 49)، an example of this is when the company provides job opportunities, housing, cares for the health of its employees, pays their salaries, paves roads, provides special goods suitable for consumer capabilities, such as focusing on product pricing and its shelf life before it becomes unsuitable for use, conducting afforestation and pollution control activities, paying taxes, making donations, and so on (Khamis, 2015, p. 46) .has been distinguished into two categories as follows: (Al-Ghazwi, 2010, pp. 19-20)

Internal Social Benefits:
These result from elements that can be priced, based on the idea of calculating economic income according to economist John Richard Hicks (1946), meaning that any activity or element that cannot be assigned a value or price falls outside of this idea and is not part of economic income, thus it is not considered an internal return. Such elements include employee health, customer satisfaction, environmental quality, and community welfare. These are all factors that are difficult to assign pricing rates to, especially in terms of quantity and money.

Based on the above, adopting Hicks' economic idea implies that everything within the realm of economics should have a price that can be defined. This view excludes benefits received by the company that cannot be measured quantitatively, which does not align with the concepts of social responsibility. Many of these benefits appear in non-monetary or non-quantifiable forms, and excluding them greatly diminishes the true value and significance of social benefits.

External Social Benefits:
Similarly, these benefits are directed to external parties, not the company itself. Their value can be somewhat quantified based on the cost that the company incurred to achieve this social activity or benefit. For example, what the company spends to address housing, unemployment, transportation, or environmental protection issues represents a benefit to these external parties. As it seems, these benefits are easier to express or evaluate in monetary and quantitative terms. Many researchers, studies, and accounting bodies focus on this type of benefit, seeing it as more objective.

Fields of Social Responsibility Accounting:
There has been some disagreement regarding the enumeration of the fields and activities of social responsibility accounting, but the most common and widely recognized ones are four, which are: human resource development, product development and customer protection, local community development, and environmental development. These have been agreed upon and established by most studies, research, and literature (Boulasnam & Ben Faraj, 2012, pp. 11-12) . However, regarding the fields covered by research related to social responsibility, suppliers and investors are included, and it is even possible to add the government and other parties. The fields and activities of social responsibility and the fields and activities of social responsibility accounting are the same. However, the company is not obligated to adopt all of these fields in order to practice accounting for them. This is not a requirement or constraint; what the company is capable of doing in terms of social activities should be subject to accounting. This depends on its capabilities, priorities, and so on. (Al-Loulo, 2009, p. 35)

Social Accounting Measurement:
It is the quantitative, monetary, and descriptive expression, and any method that can measure a social activity, provided that the measurement process is accurate and objective. This relies on historical and future scenarios of the company's social performance, taking into account the prevailing accounting principles, legislation, values, and customs in the company's environment. The results of this measurement should be presented in a precise, simplified, useful, and clear way for its users, showing how these social activities affect the company's performance within its financial statements (Ben Al-Ayesh, 2017-2018, pp. 101-102). As indicated by the definition, measurement is a tool or means to achieve the goals of accounting.

In another definition, social accounting measurement is a necessity for the company to fulfill its social responsibility, aiming to show its net social contribution to all internal and external sectors and parties affected by its activities. This is done by recording the company's social activities from the date they occurred, tracking their movement over time to show changes in their components, classifying them into social costs and benefits, and adopting the most appropriate and best indicators, variables, and measures in the measurement process (Abbas, 2016, p. 46) .This definition shows that social measurement is a continuous process, and its application cannot be done without considering the company's previous information.

The researcher believes that social accounting measurement is an attempt to define and express numerically (quantitatively) and descriptively the social issues, phenomena, and activities that the institution practices.

Social Accounting Disclosure:
According to the definition of Brendan O'Dwyer, it is the communication lines that link the company with its environment (stakeholders and society in general), through revealing the various environmental and social impacts arising along those lines. (O'Dwyer, 2004, p. 06) On the other hand, the definitions of **Jennifer J. Griffin andJohn F. Mahon, Burke Lee and Richard C** agree that this disclosure is the presentation of the company's social data, enabling the evaluation of its social performance. (Griffin & Mahon, 1997, p. 04)
Meanwhile, the definition by **Walid Naji Al-Hayali** sees this type of disclosure as concerned with methods of reporting the company's social activities to different segments of society, with financial statements and accompanying reports being the best way to achieve this. (Al-Hayali, 2002, p. 47) As for **Remili Sanaa Mohamed Rizq**, she views this disclosure as the clarification of the environmental and social impacts resulting from the company's relationship with society due to its economic activities. It is an extension of the company's accountability beyond its traditional role, assuming that the company's responsibility is not only towards its shareholders. Therefore, social disclosure touches on five dimensions: (shareholders, suppliers and customers, employees, the environment, and society) (Remili, 2016, pp. 336-337).
The researcher believes that social accounting disclosure is the mechanism concerned with revealing, presenting, and reporting, allowing the provision of information related to the institution's efforts in the field of social responsibility, to all stakeholders.

The Emergence and Definition of Sustainable Development:
Most references and literature trace the official emergence of the concept of sustainable development as a term to the United Nations Conference on the Human Environment, or the Stockholm Summit. The Stockholm Conference on the Human Environment, held by the United Nations in 1972 in Sweden with the participation of 133 countries, was the first initiative and international framework in this regard. It discussed various topics such as: (poverty, environmental issues, lack of balanced development, protection of the Earth, rights of future generations, etc.), paving the way and planting the seeds for the emergence of the concept of sustainable development (Choondassery, 2017, p. 04) . It was introduced by the scholars Iñaki Sáez and Maurice Strong, among others, and was later used for the first time by the International Union for Conservation of Nature in 1980, through the release of a report titled "The Global Survival Strategy" (Khanchoul, 2018, p. 74) .

While the definitions related to sustainable development have overlapped, varied, and diversified, we find the definition provided by the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992 (Earth Summit). According to the third and fourth principles of the conference, it is the responsibility of nations to achieve development, and this is a right granted to them. Sustainable development is the achievement of developmental and environmental needs for both present and future generations in an equal manner. It is development that does not occur in isolation from environmental issues and their protection .(Snoussi & Rahmani, 2008)

The definition of the World Commission on Environment and Sustainable Development, in its 1987 report, states that sustainable development is a situation in which development sees integration between the economy and the environment, where human needs, especially the basic needs of the most deprived groups, are aligned over time (past, present, and future) with the limitations imposed by the trends in investments, technological growth, regulatory and institutional changes, and resource consumption processes. (Djoudi, 2017-2018, p. 24)

This definition aims to achieve justice by meeting developmental needs between all generations equitably, while balancing environmental and developmental needs, ensuring that development does not overshadow the environment. (Delwar, Mohd, & Bhuiyan, 2016, p. 339)

According to **Darry Roy and T. Montebon**, sustainable development is the one that combines both the economy and the environment, preserving long-term well-being through proper planning, good resource management, and effective monitoring.(T Montebon, 2018, p. 02)

Jean-Jacques Pluchart and Denis Granzou also linked sustainable development to the business sector, defining it as a new model for the growth and development of companies, attempting to regulate the relationships between stakeholders (managers, shareholders, etc.) and create sustainable and comprehensive value for different beneficiaries, through a set of legal, social, economic principles, and more.(Pluchart & Granzou, 2010, p. 01)

The researcher believes that, in short, sustainable development is a comprehensive process that touches all areas and aspects, aiming to meet human needs (both present and future).

Dimensions of Sustainable Development:

Some studies formulate the relationship of sustainable development based on its dimensions according to the following formula (Fadala & Qaroumi, 2017, p. 52):

Sustainable Development = Economic Growth + Social Justice + Environmental Protection.

The economic, social, and environmental dimensions are the three most widely discussed and agreed-upon dimensions, upon which the concept of sustainable development is built. These are called the core dimensions, as they originate from the United Nations and were recognized in the definition presented by the Brundtland Commission at the Earth Summit on sustainable development. (Ben Aouali, 2021-2022, p. 28)

1. **Economic Dimension:**
   This dimension focuses on the impacts that the economy has on the environment both currently and in the future. It also concerns issues related to economic and financial efficiency, sustainability, and the employment (selection and financing) of industrial technologies, in line with available resources, capital, and the environmental capacity to absorb the demands of economic growth, especially with the continued decline in global energy reserves, while global demand continues to rise. This has significantly shortened the time horizon for the exploitation of these energy resources. (Latrach, 2008, p. 06)
2. **Ecological (Environmental) Dimension:**
   The ecological dimension aims to develop strategies that must be followed to protect the ecosystem and ensure the continuity of its various functions, which constitute one of the most important resources used in economic activity. (Harris, 2000, p. 06)
3. **Social (Human) Dimension:**
   Sustainable social development is primarily based on the idea of fair distribution of resources, wealth, and social services, as well as addressing social issues both between successive generations and between nations worldwide. (Harris, 2000, p. 06) The social dimension focuses on humans and meeting their basic needs (food, shelter, clothing, air, etc.), as well as complementary needs to improve their living standards and well-being (employment, entertainment, fuel, etc.). While humans are at the core of sustainable development, the social (human) dimension represents the narrower or more precise meaning of humans in this development. (Khanchoul, 2018, p. 76).

The Relationship Between Social Responsibility Accounting and Sustainable Development:

Creating this synergy between the business sector and governments, making the company's overall strategic decisions benefit everyone, and ensuring that its economic activity goes beyond the idea of merely achieving personal interests requires a rich database that represents the social and environmental aspects of companies. Based on this, efforts are measured, decisions are made, actions are taken, policies are adjusted, and regulations are enforced. This is the responsibility of social responsibility accounting, which can be employed to determine the extent to which companies contribute to achieving sustainable development through their economic, legal, humanitarian, charitable, and other activities (social responsibility). It helps assess whether they are achieving this in the way that the government wants and plans for. In the opposite case, the government can intervene with its various mechanisms to influence and refine corporate behavior in ways that serve its economic, environmental, social, technological, and other objectives. Therefore, sustainable development is considered the overall framework for social responsibility, as the latter derives its directions from the goals and dimensions of sustainable development. (Fadala & Qaroumi, 2017, p. 53)

On the other hand, social responsibility accounting links the benefits and costs of social responsibility with the activities or aspects that lead to them. This is crucial because it allows companies, first, and the government, second, to identify harmful activities, making it easier to take appropriate measures to address, control, and manage them effectively. It also allows for the rational management of these social costs.(Ben Aouali, 2021-2022, pp. 74-75)

Section Two: Study Methodology

Research Method and Data Collection Tools:
To conduct this study, the descriptive analytical method was adopted. This approach allows for describing the theoretical aspects of the study and constructing its theoretical framework through the examination, review, and analysis of previous references and literature, which constitute the secondary sources of the study. These took various forms including books, articles, academic theses, journals, conferences, and other library materials, both in Arabic and foreign languages, in addition to utilizing the internet.

The same method was also employed in the applied part of the study, which relied on a questionnaire as the primary data collection tool. The questionnaire was distributed to financial and accounting managers, and the responses were analyzed and processed using the statistical software (SPSS.25). The inductive method was also necessary when attempting to generalize the results obtained from the sample institutions to major industrial groups in Algeria.
The study tool (the questionnaire) was divided into three sections as follows:

- The first section included personal and job-related data, along with characteristics of the institutions under study. The questions in this section were closed-ended with single-answer options, including two or more alternatives.
- The second section was dedicated to the independent variable, which is social responsibility accounting. It aimed to assess the extent to which industrial groups in Algeria apply social accounting measurement through six statements, and social accounting disclosure through another six statements.
- The third section of the questionnaire focused on the dependent variable, which is sustainable development, and consisted of 12 statements.

The responses to all statements in the second and third sections were measured using a five-point Likert scale, which includes five levels for analysis and evaluation.

Study Population and Sample:
The study focused on major industrial groups in Algeria, as listed on the website of the Ministry of Industry and Pharmaceutical Production. These groups were selected because most of their activities are industrial in nature, and they represent large-scale industrial complexes that are more representative of the industrial sector as a whole in Algeria. Their total number is 11 groups, as follows: (Production, 2024)

- Pharmaceutical Industry and Drug Manufacturing Group (SAIDAL);
- Holding Company for Local Industries (DIVINDUS);
- Holding Company for Chemical Specialties (ACS);
- Holding Company for Mechanical Industries (AGM);
- Holding Company for Electronics, Home Appliances, and Electrical Industries (ELEC);
- Holding Company for Food Industries (AGRODIV);
- Holding Company for Iron and Steel Industry (IMETAL);
- Industrial Group of Algerian Cement (GICA);
- Public Economic Enterprise for the Manufacture of Railway Equipment and Supplies (FERROVIAL);
- Industrial Group of Algerian Cement (GICA);
- Holding Company for Food Industries (AGRODIV);
- Holding Company for Textile and Leather Industries (GETEX);
- Holding Company for Asset and Resource Management and Development (MADAR).

The study targeted these industrial groups along with their branches and affiliated units, which totaled approximately (309) economic units. However, by retaining only those units that are industrial in nature, large in size, and publicly owned to ensure they are Algerian, only about 125 units remained. From these, a probabilistic (random) sample was drawn, and its size was calculated using the Herbert Arkin formula.

$$\boxed{n=\frac{p(1-p)}{(SE\div t)+[p(1-p)\div N]}}$$

Where:
N : Population size
SE : Margin of error, equal to 0.05
P : Probability of the characteristic being present (neutral value) = 0.50
t : Standard score corresponding to the 0.95 confidence level, equal to 1.96

The formula yielded a sample size **n** of 94 units, meaning 94 economic (industrial) units, or in other words, 94 financial and accounting managers. However, we received 98 responses to our questionnaire, resulting in a response rate of **78.40%,** which is considered sufficient to represent our statistical population, namely the major industrial groups in Algeria.

Questionnaire Reliability:
Questionnaire reliability refers to the consistency of results and their stability over time, meaning that the results should not vary significantly if the questionnaire is re-applied to the same sample under the same conditions and circumstances within a specific period. Reliability was measured using Cronbach's Alpha coefficient, and the following table presents the reliability coefficients for the study tool:

Table (01): Cronbach's Alpha Coefficient for Measuring the Reliability of the Study Tool

Dimensions:	Number of Statements	Dimension Reliability
Dimension of Social Responsibility Accounting Measurement	06	0,735
Dimension of Social Responsibility Accounting Disclosure	06	0,785
Variable of Social Responsibility	12	0,852

Accounting Application		
Variable of Sustainable Development	12	0,875
The Questionnaire as a Whole	24	0,900

Source: Prepared by the researchers based on the outputs of the SPSS 25 software.

It is clear from the table that the overall reliability coefficient of the questionnaire is very high, reaching **0.900** for the total twenty-four (24) statements, which exceeds the acceptable threshold of **0.70**, or **0.60** according to other references. The reliability coefficients for the dimensions and variables ranged between **0.843** as a minimum and **0.931** as a maximum. This indicates that the questionnaire enjoys a very high degree of reliability and can be relied upon for the field application of the study.

Questionnaire Validity:
The validity of the study tool (the questionnaire) refers to the extent to which the questionnaire items actually measure what they were originally intended to measure. There are several types or methods for assessing validity, one of which is internal consistency validity. The following table shows the correlation coefficients between each item of every section and the total score of the section to which it belongs:

Table (02): Significance Level and Correlation Coefficients Between Each Item Score and the Total Score of Its Corresponding Section

Application of Social Responsibility Accounting							
Social Responsibility Accounting Disclosure				**Social Responsibility Accounting Measurement**			
/	**Significance Value**	**Correlation Coefficient**	**Dimension Items**	/	**Significance Value**	**Correlation Coefficient**	**Dimension Items**
Sig	0,000	0,712**	7t	Sig	0,000	0,761**	1t
Sig	0,000	0,745**	8t	Sig	0,000	0,713**	2t
Sig	0,000	0,769**	9t	Sig	0,000	0,745**	3t
Sig	0,000	0,805**	10t	Sig	0,000	0,608**	4t
Sig	0,000	0,561**	11t	Sig	0,000	0,572**	5t
Sig	0,000	0,569**	12t	Sig	0,000	0,543**	6t
Sustainable Development Variable							
/	**Significance Value**	**Correlation Coefficient**	**Dimension Items**	/	**Significance Value**	**Correlation Coefficient**	**Dimension Items**
Sig	0,000	0,663**	19t	Sig	0,000	0,564**	13t
Sig	0,000	0,678**	20t	Sig	0,000	0,529**	14t
Sig	0,000	0,613**	21t	Sig	0,000	0,744**	15t
Sig	0,000	0,797**	22t	Sig	0,000	0,475**	16t
Sig	0,000	0,590**	23t	Sig	0,000	0,762**	17t
Sig	0,000	0,637**	24t	Sig	0,000	0,753**	18t
**. Correlation is significant at the 0.01 level *. Correlation is significant at the 0.05 level							

Source: Prepared by the researchers based on the outputs of SPSS.25 software.

It is clear from the table that the correlation values between the items and the average of their respective dimensions ranged from weak to very strong, varying between (0.475**) as a minimum and (0.797**) as a maximum. All correlations were statistically significant at the 0.05 significance level, indicating that the items are consistent with the dimension to which they belong. This confirms that the items are valid and indeed appropriate for measuring what they were intended to measure.

Test of Data Normality (Normal Distribution):
The Kolmogorov-Smirnov test was used to determine the nature of the collected data (independent and dependent variables). The test results are shown in the following table:

Table (03): Normality Test of the Study Tool

Kolmogorov-Smirnov Test		
Significance Level (Sig.)	Degrees of Freedom (df)	**Test Statistic (Statistiques)**
0,200*	98	0,070

Source: Prepared by the researchers based on the outputs of SPSS.25 software.

From the previous table, it is evident that the Kolmogorov-Smirnov value for the study tool (the questionnaire as a whole) is **0.070**, and its statistical significance level is **0.200***, which is greater than the significance threshold of **0.05**. Therefore, we accept the null hypothesis (H0), which indicates that the data follow a normal distribution when the significance level is greater than **0.05**. This means that the study data follow a normal distribution, which allows us to proceed with **parametric tests** to examine the study hypothesis.

Section Three: Analysis of Respondents' Opinions and Hypothesis Testing
Analysis of Respondents' Opinions:

In this section, we present the analysis results related to the opinions of the surveyed sample concerning our questionnaire. This is done by examining the mean and standard deviation of each statement to determine its ranking and direction, as well as the overall direction of the dimension. The analysis is based on the evaluative scale of the five-point Likert scale, as follows:

Table (04): Analysis of Respondents' Opinions Regarding the Dimension of Social Accounting Measurement

Rank	Direction	Standard Deviation	Mean	Statement
4	High	0,862	3,57	1. The institution measures its efforts dedicated to serving and improving the conditions of workers
1	High	0,886	3,65	2. The institution measures its efforts dedicated to developing production, protecting and serving consumers
6	High	0,900	3,50	3. The institution measures its efforts dedicated to serving the community (public contributions)
3	High	,0938	3,61	4. The institution measures its efforts dedicated to preserving the environment and its resources and assets
2	High	0,957	3,63	5. The institution measures the extent of damages and various negative impacts it has caused
5	High	0,800	3,56	6. The institution measures the benefits it gains from practicing social responsibility, whether for itself or for stakeholders and interested parties
-	**High**	**0,58484**	**3,5884**	**Mean of the Social Accounting Measurement Dimension**

Source: Prepared by the researchers based on the outputs of SPSS.25 software.

It is observed from the table that the general trend of the respondents' opinions is positive regarding the attention given to the accounting measurement of social responsibility activities in the industrial institutions under study. This is reflected in an overall mean of 3.5884, which is higher than the neutral value of 3, with a standard deviation of 0.58484. The items in this dimension indicated a high level of agreement (Agree).

Table (05): Analysis of Respondents' Opinions Regarding the Dimension of Social Accounting Disclosure

Rank	Direction	Standard Deviation	Mean	Statement
3	High	0,996	3,56	1. The institution discloses its activities aimed at improving the conditions of workers.
1	High	0,948	3,73	2. The institution discloses its activities that aim to enhance the product and serve the consumer.
4	High	,0826	3,55	3. The institution discloses its initiatives that seek to develop the community and adhere to its prevailing values.
5	High	,0815	3,53	4. The institution discloses its contributions to protecting the environment and natural resources.
6	High	0,789	3,48	5. The institution discloses the negative impacts of its activities on various stakeholders.
2	High	0,739	3,62	6. The institution discloses the benefits achieved from fulfilling its social responsibility toward stakeholders.
-	**High**	**0,59505**	**3,5799**	**Mean of the Social Accounting Disclosure Dimension**
-	**High**	**0,53907**	**3,5842**	**Mean of the Social Responsibility Accounting Variable**

Source: Prepared by the researchers based on the outputs of SPSS.25 software.

It appears from the table that the overall mean for the social responsibility accounting disclosure dimension indicates a high level, with a mean of 3.5751 and a standard deviation of 0.53421. The same applies to the social responsibility accounting variable, which recorded a mean of 3.6173 and a standard deviation of 0.47824, indicating a high level as well. Thus, the targeted sample agrees on the presence and application of this practice in the institutions under study.

Table (06): Analysis of Respondents' Opinions Regarding Sustainable Development

Rank	Direction	Standard Deviation	Mean	Statement
Economic Dimension				
3	**High**	0,889	3,82	7. The institution works on continuously increasing the volume of goods and services produced.
4	**High**	0,911	3,79	8. The institution works on increasing and expanding the volume of investments.
12	**High**	1,026	3,65	9. The institution works on increasing workers' wages and the per capita share of national income.
7	**High**	0,899	3,70	**10.** The institution works on meeting the basic and essential human needs (food, drink, clothing, education, health, etc.).
Social Dimension				
10	**High**	0,899	3,52	11. The institution works to achieve a better quality of life for the population.
11	**High**	0,997	3,50	12. The institution works to ensure the fair distribution of resources, wealth, and services within society.
8	**High**	0,820	3,61	13. The institution works to respect and preserve the fundamental components of society.

Rank	Direction	Standard Deviation	Mean	Statement
9	**High**	0,863	3,55	14. The institution works to support developmental projects in the community.
Environmental Dimension				
2	**High**	0,620	3,87	15. The institution works on rationalizing the use and consumption of natural resources without excess or waste.
5	**High**	0,897	3,76	16. The institution works on researching and using renewable and environmentally friendly resources and energy.
1	**High**	0,707	3,93	17. The institution works on preserving the elements and components of the ecosystem (water, air, soil, animals, plants...).
6	**High**	0,737	3,74	18. The institution works on recycling waste, treating it, and controlling industrial residues.
-	**High**	**0,56011**	**3,7032**	**Mean of the Sustainable Development Variable**

Source: Prepared by the researchers based on the outputs of SPSS.25 software.

It is observed from the table that the overall mean for this dimension is 3.7032 with a standard deviation of 0.56011, indicating that the general trend of the respondents' opinions is high. Accordingly, the institutions under study do indeed contribute to achieving sustainable development in Algeria across all its dimensions.

Hypothesis Testing:
The hypothesis states that:
"The application of social responsibility accounting in major industrial groups in Algeria positively affects the achievement of sustainable development."
This hypothesis was tested using multiple linear regression.
We accept the null hypothesis (H0) and reject the alternative hypothesis (H1) if the significance level (Sig) is greater than the significance threshold (α = 0.05).
Conversely, we reject the null hypothesis (H0) and accept the alternative hypothesis (H1) if the significance level (Sig) is less than or equal to (α = 0.05).
Where:
H0 : The application of social responsibility accounting in major industrial groups in Algeria does not positively affect the achievement of sustainable development.
H1 : The application of social responsibility accounting in major industrial groups in Algeria positively affects the achievement of sustainable development.

Appendix (08): Results of Multiple Linear Regression Analysis Between the Dimensions of Social Responsibility Accounting and Sustainable Development

<table>
<tr><th colspan="6">Dimensions of the Social Responsibility Accounting Application Variable</th><th>/</th></tr>
<tr><th colspan="2">Significance Level</th><th>F-value</th><th colspan="2">Coefficient of Determination (R²)</th><th>Correlation Coefficient (R)</th><th rowspan="2">Sustainable Development Variable</th></tr>
<tr><td colspan="2">0,000</td><td>23,919</td><td colspan="2">0,335</td><td>0,579</td></tr>
<tr><th>T Significance Level</th><th>Calculated T-Value</th><th>Beta (β)</th><th>Standard Error</th><th>Regression Coefficients</th><th>Constant and Dimensions of the Independent Variable</th><th>Model</th></tr>
<tr><td>0,000</td><td>5,625</td><td>-</td><td>0,315</td><td>1,773</td><td>Constant</td><td>Dependent Variable</td></tr>
</table>

0,000	5,426	0,611	0,108	0,586	**Social Accounting Measurement Dimension**	**Sustainable Development Variable**
0,645	-0,450	-0,051	0,106	-0,048	**Social Accounting Disclosure Dimension**	

Source: Prepared by the researchers based on the outputs of SPSS.25 software.

Based on the above table related to the multiple linear regression analysis between the independent variable (social responsibility accounting) and the dependent variable (sustainable development), it is observed that the value of the correlation coefficient (R) reached 0.579, indicating a moderate correlation between the combined dimensions of social responsibility accounting and sustainable development.

The coefficient of determination (R^2) reached 0.335, which means that 33.5% of the changes occurring in the sustainable development variable in the institutions under study are explained by the practice of social responsibility accounting, while the remaining 66.5% are attributed to other variables not included in the study model. The calculated F-value was 23.919 with a significance level Sig = 0.000, which is less than 0.05, confirming the statistical significance of the effect.

It is also clear from the table that the dimension of social accounting measurement had a significance level of 0.000, which is less than 0.05, indicating that it significantly affects sustainable development in the institutions under study when combined with other explanatory variables. On the other hand, the dimension of social accounting disclosure had a significance level of 0.645, which is greater than 0.05, indicating that it does not have a statistically significant effect on sustainable development in the institutions under study.

Therefore, we accept the first part of the hypothesis and reject the second part. That is, there is a statistically significant effect of social accounting measurement on sustainable development at a significance level of 0.05, while no significant effect is found when it comes to the second dimension of social responsibility accounting, which is social accounting disclosure.
Accordingly, the multiple linear regression equation takes the following form:

$$\mathbf{Y = 0{,}586X_1 + 1{,}773}$$

Where:
Y :The dependent variable, which is sustainable development;
X1 :The dimension of social responsibility accounting measurement;
0.586: The slope or regression coefficient for (social responsibility accounting measurement);
This means that a one-unit increase in the application of social responsibility accounting measurement in the institutions under study leads to an increase in their contribution to sustainable development by a value of 0.586.
(1.424): The constant value (b).

Conclusion

Accounting is considered one of the effective economic tools in identifying the external effects of business organizations' actions effects that go beyond human interests to include social costs and social returns. Accounting is viewed as a system that interacts with its environment and is not separate from it; it continuously adapts to environmental changes. From the perspective that the company is a part of its environment and both influences and is influenced by it (Company–Accounting), it becomes necessary to adapt the accounting system to any changes in the company's operating environment. Therefore, in this study, we addressed social responsibility accounting and attempted to demonstrate its impact on sustainable development. Ultimately, the following findings and recommendations were reached:

1. Study Results:

- Social responsibility accounting remains a theoretical concept confined to research, studies, and publications, while its practice is still limited to individual and random initiatives that lack structure, standardization, and regulation;
- Social responsibility accounting allows the presentation of social, environmental, economic, legal, ethical, and charitable efforts of companies, thereby illustrating the extent of business organizations' contributions to achieving sustainable development;
- One of the strongest links between sustainable development and social responsibility accounting lies in the fact that the latter measures companies' social responsibility activities and provides a database in this regard, which can be utilized by companies and regulatory bodies for control, evaluation, decision-making, and other necessary measures. This ultimately enables the alignment of corporate strategies with the country's adopted sustainable development strategy and ensures rational management of societal activities and resources (cost rationalization);
- Based on the respondents' answers, major industrial groups in Algeria conduct accounting measurement of their social responsibility activities to a high degree, with a recorded mean of (3.5884) and a standard deviation of (0.58484);
- It was observed that major industrial groups in Algeria focus more on measuring social costs (negative effects) than on social benefits (whether realized by them or by other stakeholders). This is interpreted as companies being primarily concerned with quantifying damages, whether caused by them or resulting from their engagement in social responsibility;
- Based on the respondents' answers, major industrial groups in Algeria carry out accounting disclosure of their social responsibility activities to a high degree, with a recorded mean of (3.5751) and a standard deviation of (0.53421);
- It was noted that major industrial groups in Algeria tend to disclose more about social benefits (positive effects) than about social costs (whether realized by them or by other stakeholders), as publishing such information gives a positive image and impression of these groups;
- Social responsibility accounting in major industrial groups in Algeria focuses, both in terms of measurement and disclosure, mainly on activities related to the promotion and development of production and the protection and service of consumers probably because such activities are directly tied to their survival and revenue, which is largely based on customer satisfaction;
- The most significant contributions of major industrial groups in Algeria to sustainable development focus on expanding investment volume in terms of the economic dimension—with a mean of (3.79) and a standard deviation of (0.911) and on respecting and preserving core societal values in the social dimension with a mean of (3.61) and a standard deviation of (0.820). In the environmental dimension, they focus more on preserving the components of the ecosystem (water, air, soil, animals, plants, etc.), with a mean of (3.93) and a standard deviation of (0.707). Overall, the means of all items related to the sustainable development variable were very close, indicating high and balanced interest from these groups in all dimensions of sustainable development;
- Based on the respondents' answers, there is a moderate and positive correlation between the dimensions of social responsibility accounting (social accounting measurement and disclosure) and the sustainable development variable in major industrial groups in Algeria, with a correlation coefficient (R) of (0.590);
- The implementation of social responsibility accounting in major industrial groups in Algeria has a positive effect on achieving sustainable development. However, this impact stems solely from

accounting measurement rather than disclosure. Specifically, a one-unit increase in the application of social responsibility accounting measurement results in a (58.6%) increase in their contribution to sustainable development.

2. Recommendations:

- International, local, and regulatory bodies concerned with social responsibility accounting must pay greater attention to standardizing and enforcing its application;
- It is advisable to utilize traditional accounting to measure and disclose social responsibility activities, with necessary adjustments to fit the nature of these activities until a fully independent accounting system is developed to assess social performance. This is preferable to neglecting or ignoring the accounting of such activities under the pretext of lacking mechanisms, tools, or methods;
- As an initial step, specialized institutions either governmental or independent should be established to manage and implement social responsibility for business organizations, and to practice accounting for it. This would ease the entry of interested organizations into this field and contribute to its encouragement and development;
- Major industrial groups in Algeria should continue practicing social responsibility accounting and move toward its serious and effective application, especially given its positive impact on achieving sustainable development;
- Major industrial groups in Algeria should investigate the reason why their social responsibility disclosure does not contribute to sustainable development and work to identify and remedy this issue.

References List

First: References in Arabic

1. Ahmed Kareem Mudhhi, The Impact of Adopting Social Responsibility Accounting on the Profitability of Telecommunications Companies in the State of Kuwait, Master's Thesis, Faculty of Money and Business Administration, Department of Accounting, Al al-Bayt University, Mafraq Governorate, Jordan, Second Semester 2017.
2. El Djelali Ben Aouali, Measurement and Accounting Disclosure of Environmental Costs According to the Dimensions of Sustainable Development – An Econometric Study Using Structural Equation Modeling on a Sample of Large Industrial Enterprises in Western Algeria, Doctoral Dissertation, Faculty of Economic, Management and Commercial Sciences, Department of Financial and Accounting Sciences, Specialization in Advanced Accounting and Taxation, University of Abou Bekr Belkaid, Tlemcen, Algeria, 2021–2022.
3. Hussein Abdul Jalil Al-Ghazwi, Research for the Course of Contemporary Accounting Issues, Master's Thesis, Faculty of Administration and Economics, Department of Accounting, Arab Academy in Denmark, 2010. Available at: https://www.ao-academy.org/ar/2015/9/2915.html.
4. Khaled Fadala, Hamid Qaroumi, The Role of Adopting Social and Environmental Responsibility in the Corporation to Contribute to Achieving Sustainable Development, Maaref International Peer-reviewed Scientific Journal, Department of Economic Sciences, University of Bouira, Vol. 12, No. 22, Year 12, pp. 39–57, 2017.
5. Donia Khanchoul, The Reality of Sustainable Development in Algeria – An Analytical Study for the Period 1992–2015, Economic Studies Journal, Vol. 05, No. 01, pp. 71–92, June 2018.
6. Dhahabia Latrache, The Requirements of Sustainable Development in Developing Countries Under Globalization Rules, Research Paper at the International Scientific Conference on: Sustainable Development and the Efficient Use of Available Resources, Faculty of Economic and Management Sciences, Farhan Abbas University, Setif, Algeria, in cooperation with the Laboratory of Partnership and Investment in SMEs in the Euro-Maghreb Area, 7–8 April 2008.

7. Zouleikha Snoussi, Hajar Bouziane Rahmani, The Environmental Dimension of Sustainable Development Strategy, Research Paper at the International Scientific Conference on: Sustainable Development and the Efficient Use of Available Resources, Faculty of Economic and Management Sciences, Farhan Abbas University, Setif, Algeria, in cooperation with the Laboratory of Partnership and Investment in SMEs in the Euro-Maghreb Area, 7–8 April 2008.
8. Sanaa Remili Mohamed Rizq, The Impact of the Level of Social Responsibility Disclosure on Company Value – An Applied Study on Companies Listed on the Egyptian Stock Exchange, Accounting Thought, Faculty of Commerce, Department of Accounting and Auditing, Ain Shams University, Egypt, Vol. 20, No. 04, pp. 330–374, December 2016.
9. Al-Sadiq Salem Aqneiber, Mohamed Omar Abu Saif, Abu Bakr Jumaa Aweitil, The Extent of Commitment of Libyan Companies to Disclose Social Responsibility Accounting Items – A Field Study on the General Electricity Company – Al Khums, First Economic Conference for Investment and Development in the Al Khums Region, Faculty of Economics and Commerce, Department of Accounting, Al-Mergib University, Al Khums, Libya, 25–27 December 2017.
10. Abbas Mahdi Al-Shirazi, Accounting Theory, Dhāt al-Salāsil Publishing House, Kuwait, 1990.
11. Abdelkader Houa, Dimensions and Obstacles of Social Responsibility Accounting and Accounting Methods for Disclosure, Journal of Business Administration and Economic Studies, Vol. 07, No. 01, pp. 339–360, 2021.
12. Fatima Ben Alayech, The Extent of Application of Measurement and Accounting Disclosure of Social Responsibility in Institutions, Economic Notebooks Journal, Vol. 10, No. 02, pp. 39–56, 2018.
13. Fatima Ben Alayech, The Extent of Application of Measurement and Accounting Disclosure of Social Responsibility to Achieve Sustainable Development – An Analytical and Econometric Study on a Sample of CAC 40 Institutions for the Period (2014–2016), Doctoral Dissertation, Faculty of Economic, Commercial and Management Sciences, Department of Finance, Accounting and Marketing in Institutions, University of Badji Mokhtar, Annaba, Algeria, 2017–2018.
14. Laila Djoudi, The Role of Islamic Finance in Environmental Protection and Achieving Sustainable Development, Doctoral Dissertation, Faculty of Economic, Commercial and Management Sciences, Department of Economic Sciences, Specialization in Money and Finance, University of Mohamed Khider, Biskra, Algeria, 2017–2018.
15. Mohamed Boulasnam, Zouwina Ben Faraj, Factors Affecting Social Disclosure – A Case Study of the Arab Potash Company, Paper Presented at the International Forum on: Business Organizations and Social Responsibility, Organized by the Faculty of Economic, Commercial and Management Sciences, Tahri Mohamed University, Béchar, Algeria, 14–15 February 2012.
16. Mohamed Salem Al-Loulo, The Possibility of Applying Social Responsibility Accounting by Public Shareholding Companies – An Applied Study on Companies Listed in the Palestine Securities Exchange, Submitted as a Partial Requirement for the Master's Degree, Faculty of Graduate Studies, Faculty of Commerce, Department of Accounting and Finance, Islamic University, Gaza, Palestine, 2009.
17. Mohamed Safir, Yamina Hamana, Boualem Moulay, Mechanisms for Measuring Corporate Social Performance and Methods of Disclosure, Forum for Economic Studies and Research Journal, No. 04, pp. 04–14, December 2018.
18. Mohamed Tarchi, Iman Yakhlef, Disclosure of Social Responsibility from an Accounting Perspective, Entrepreneurial Economics Leadership Journal, Hassiba Ben Bouali University, Chlef, Algeria, Vol. 03, No. 05, pp. 99–117, 2017.
19. Mohamed Moussa Ahmed Abbas, The Role of Social Responsibility Accounting in Measuring Social Activities in Industrial Companies – A Field Study on Atbara Cement Co. Ltd and Al-Salam Cement Co., Partial Fulfillment for a Master’s Degree, Faculty of Graduate Studies and Scientific Research, Faculty of Economics and Business Administration, Department of Accounting, Shendi University, Sudan, 2016.
20. Nabou Majeed, Lawalbia Fawzi, The Problem of Measurement and Disclosure of Social Responsibility Accounting in Economic Institutions – Presentation of a Set of Models, Mafahim

Journal for In-depth Philosophical and Human Studies, Ziane Achour University, Djelfa, Algeria, No. 09, pp. 245–258, April 2021.

21. Noufan Hamed Mohamed Al-Alimat, Accounting Measurement of the Costs of Social Responsibility Activities and Their Disclosure in Final Financial Statements – An Applied Case on Jordan Petroleum Refinery Company (Public Shareholding), Doctoral Dissertation, Department of Graduate Studies, Faculty of Economics, University of Damascus, 2010.
22. Ministry of Industry and Pharmaceutical Production, Industrial Groups. Available at: https://www.industrie.gov.dz/groupes-industriels/, Accessed on: 18 August 2024, Time: 20:36.
23. Youssef Haroun Khamis Mohamed, Fatima Amer Hammad Hamed, The Role of Accounting Measurement and Disclosure of Social Costs in Enhancing Financial Performance Efficiency of Business Enterprises – A Case Study of the Sudanese Telecommunications Company Ltd (Sudatel), Research Submitted for the Master's Degree, Faculty of Graduate Studies, Specialization in Accounting and Finance, Sudan University of Science and Technology, Sudan, 2015.

Second: References in Foreign Languages (Translated)

1. Brendan O'Dwyer, The Emergence and Future Development of Corporate Social Disclosure in Ireland: The Perspective of Non-Government Organizations, The Fourth Asia Pacific Interdisciplinary Research in Accounting Conference, July 4–6, Singapore, 2004.
2. Darry Roy, T. Montebon, Pre-service Teachers' Concept of Sustainable Development and Its Integration in Science Lessons, Jurnal Pendidikan Humaniora, Vol. 06, No. 01, pp. 01–08, 2018. Available at: file:///C:/Users/dz/Downloads/10986-16425-1-PB.pdf
3. David F. Linowes, An Approach to Socio-Economic Accounting, Conference Board Record, Vol. 9, pp. 15–26, November 1972, p. 33. Available at: https://www.srcc.edu/system/files/Pg%2015-26,%20David%20F%20Linowes,%20Socio-economic%20accounting.pdf
4. Federick D. S. Choi, Gerhard Mueller, International Accounting, Prentice Hall Inc., Second Edition, USA, 1984.
5. Jean-Jacques Pluchart, Denis Granzou, Organizational Change in Socially Responsible Companies, Research Papers, 2010.
6. Jennifer J. Griffin, John F. Mahon, The Corporate Social Performance and Corporate Financial Performance Debate: Twenty-Five Years of Incomparable Research, Business & Society, SAGE Social Science Collections, Vol. 36, No. 01, pp. 05–31, March 1997. Available at: file:///C:/Users/dz/Downloads/CFPCSP1997.pdf
7. Jonathan M. Harris, Basic Principles of Sustainable Development, G-DAE Working Paper No. 00-04, Global Development and Environment Institute, Tufts University, USA, 2000.
8. Mohammad Delwar Hussai, Mohd Suberi Bin Ab. Halim, Abul Bashar Bhuiyan, Environmental Accounting and Sustainable Development: An Empirical Review, International Journal of Business and Technopreneurship, Vol. 06, No. 02, pp. 335–350, June 2016. Available at: ijbt_vol_6_june_2016_9_335-350.pdf
9. Sybil C. Mobley, The Challenge of Socio-Economic Accounting, The Accounting Review, Published by the American Accounting Association, Vol. 45, No. 04, pp. 762–768, October 1970.
10. Yesudas Choondassery, Rights-based Approach: The Hub of Sustainable Development, Discourse and Communication for Sustainable Education, Vol. 08, No. 02, pp. 17–23, 2017. Available at: file:///C:/Users/dz/Downloads/Rights based_Approach_The_Hub_of_Sustainable_Devel.pdf
11. Jean-Jacques Pluchart, Denis Granzou, Organizational Change in Socially Responsible Companies, Research Papers, 2010.