

Presenting the pattern of the Green Accounting Model Based on Social Responsibility in the Field of Social Health: Grounded Theory Approach

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Abstract: Green accounting, grounded in social responsibility within the domain of societal health, enhances organizational transparency and accountability regarding their impacts on societal well-being by integrating environmental and social criteria into financial reporting. Given the lack of comprehensive and integrated frameworks in this area, the present study aims to propose a green accounting model based on social responsibility in the context of societal health. This study employs a mixed-methods exploratory approach. In the qualitative phase, a grounded theory methodology was utilized, drawing on semi-structured interviews with experts to develop a qualitative model. The qualitative phase involved 15 academic and professional experts, while the quantitative phase included a sample of 404 members of the official accounting community in Tehran and Shiraz. In the quantitative phase, confirmatory factor analysis was applied using a researcher-designed 93-item questionnaire to evaluate the suitability of the proposed qualitative model. The qualitative model comprises six categories (causal conditions, core category, contextual conditions, intervening conditions, strategies, and consequences), 19 secondary codes (core category: development of a green accounting framework, enhancement of corporate social responsibility, societal health in accounting; causal conditions: financial factors, structure of corporate financial reports, organizational accountability, corporate learning; strategies: environmental incentives, environmental disclosure, environmental actions; consequences: accounting profit, creation of a green cycle, optimization of decision-making, environmental values; contextual conditions: corporate structure characteristics, corporate governance characteristics, environmental conditions; intervening conditions: environmental pressures and corporate policy-making), and 93 primary codes. Furthermore, the results of the confirmatory factor analysis validated the proposed model. The findings of this study can foster transparency in environmental and social reporting and facilitate the implementation of effective programs to improve public health and well-being by integrating green accounting with corporate social responsibility. This, in turn, can enhance societal trust in organizations and promote more constructive collaborations between companies and society.

Keywords: Green Accounting, Social Responsibility, Social Health, Corporate Sustainability

1. Introduction

The increasing intensity of environmental degradation, climate change, depletion of natural resources, pollution, and growing social expectations regarding corporate accountability has significantly transformed the role of business organizations in contemporary societies. Organizations are no longer evaluated solely on the basis of profitability, productivity, or shareholder returns; rather, their environmental and social impacts have become

essential dimensions of organizational legitimacy and long-term sustainability. This transformation has broadened the conventional understanding of corporate performance and has created growing pressure for accounting systems to provide information that extends beyond conventional financial transactions. Traditional accounting systems primarily focus on monetary transactions, revenues, expenditures, assets, liabilities, and profitability, whereas many environmental and social consequences of corporate activities remain either inadequately recognized or entirely excluded from conventional financial statements. Green accounting has consequently emerged as an important mechanism for identifying, measuring, analyzing, and reporting the environmental consequences of organizational activities and integrating such information into managerial and financial decision-making [1]. The increasing importance of this approach reflects a broader transition from narrowly financial models of organizational accountability toward frameworks that incorporate environmental responsibility, social value creation, and sustainable development.

Green accounting provides a systematic approach for incorporating environmental costs, environmental benefits, resource consumption, waste, emissions, ecological liabilities, and sustainability-related investments into accounting processes. Its significance arises from the fact that organizational activities frequently impose costs on the environment and society that are not fully captured by traditional accounting measurements. Environmental degradation, pollution, excessive energy consumption, waste production, ecosystem destruction, and depletion of natural resources may generate substantial social and economic consequences despite remaining external to conventional cost calculations. Green accounting therefore attempts to internalize environmental considerations within organizational information systems and to provide managers, investors, regulators, and other stakeholders with more comprehensive information about corporate performance. In this regard, green accounting should not be viewed merely as an extension of conventional accounting techniques, but rather as a managerial and governance mechanism through which environmental considerations become integrated with organizational strategy, accountability, resource allocation, and performance evaluation [2]. Evidence from developing economies has similarly emphasized the need for structured green accounting systems capable of integrating environmental indicators with financial and organizational decision-making [3].

The development of green accounting is also closely associated with the growing prominence of sustainable development and corporate sustainability. Sustainable development requires organizations to achieve economic objectives without compromising environmental resources and social welfare, thereby integrating economic, environmental, and social dimensions into organizational decision-making. From this perspective, accounting cannot remain exclusively concerned with short-term financial performance, because the sustainability of organizations increasingly depends on their ability to understand and manage environmental risks, resource dependencies, stakeholder expectations, and social consequences. Green accounting can provide the informational infrastructure necessary for this transition by enabling organizations to identify environmental costs, evaluate ecological performance, and assess how resource-related decisions influence long-term organizational outcomes. Studies have shown that environmental accounting practices can contribute positively to organizational performance by improving environmental awareness, resource efficiency, managerial control, and strategic decision-making [4]. Furthermore, the adoption of green accounting has been associated with sustainable performance because it encourages organizations to consider environmental costs and benefits systematically when allocating resources and assessing operational outcomes [5].

The relationship between green accounting and sustainable development has become particularly important in industries characterized by extensive resource consumption and considerable environmental impacts.

Organizations operating in manufacturing, energy, construction, transportation, and other environmentally sensitive industries are increasingly required to identify and manage environmental externalities associated with their operations. Research examining environmentally intensive industries has demonstrated that organizations face numerous environmental issues related to pollution, energy use, waste generation, resource consumption, and the environmental impacts of production processes [6]. Similarly, evidence from manufacturing sectors indicates that environmental accounting disclosure has become increasingly important for demonstrating organizational accountability and providing stakeholders with information concerning environmental activities and impacts [7]. Green accounting therefore serves both an internal managerial function and an external reporting function: internally, it provides information for planning, cost management, environmental investment, and resource allocation, while externally, it strengthens transparency regarding corporate environmental performance.

Environmental accounting has also become increasingly connected with broader corporate environmental management systems. Organizations need reliable environmental information not only for reporting purposes but also for identifying inefficiencies, evaluating environmental risks, and designing environmental strategies. Environmental auditing represents one of the mechanisms through which the accuracy, completeness, and credibility of environmental information can be assessed, thereby strengthening the effectiveness of environmental management systems [8]. Moreover, environmental management accounting can contribute to the financial, environmental, and economic performance of firms by providing managers with information regarding environmental costs, resource flows, green innovation, and environmental investment [9]. These developments indicate that green accounting increasingly functions as an integrated component of organizational management rather than as a separate reporting activity. Its usefulness depends on its capacity to connect accounting information with environmental objectives, managerial decision-making, organizational learning, technological innovation, and long-term strategic planning.

The increasing importance of corporate social responsibility has further expanded the conceptual foundations of green accounting. Corporate social responsibility reflects the expectation that organizations should recognize their responsibilities toward stakeholders, communities, employees, society, and the natural environment rather than focusing exclusively on shareholder wealth maximization. The expansion of corporate social and environmental responsibility has intensified expectations that firms should demonstrate accountability for both the direct and indirect consequences of their activities [10]. Corporate social responsibility can therefore provide an important normative foundation for green accounting because environmental accountability represents an essential component of responsible corporate behavior. From this perspective, green accounting transforms environmental responsibility into measurable information by identifying environmental costs, monitoring environmental performance, and communicating environmental impacts to stakeholders. At the same time, the relationship between corporate social responsibility and organizational outcomes suggests that responsible corporate behavior may influence financial and non-financial performance through mechanisms such as reputation, stakeholder trust, access to resources, risk reduction, and enhanced legitimacy [11].

Recent research has increasingly situated green accounting within the broader environmental, social, and governance framework. ESG considerations have become central to contemporary discussions of investment, corporate sustainability, stakeholder relations, and responsible business conduct. A global review of ESG-related research demonstrates the growing importance of environmental, social, and governance factors in shaping business investment and sustainability, indicating that organizations are increasingly evaluated according to multiple dimensions of value creation rather than financial performance alone [12]. This shift has implications for

accounting systems because the information required by stakeholders now extends beyond traditional financial statements. Organizations must increasingly disclose data concerning environmental performance, social responsibility, governance arrangements, sustainability risks, and long-term impacts. Green accounting may facilitate this process by establishing systematic mechanisms for collecting, analyzing, and reporting environmental information and linking it to organizational performance and strategic objectives.

Nevertheless, the relationship between accounting and sustainability has historically been characterized by conceptual tensions. Traditional accounting has frequently been criticized for prioritizing economic valuation, organizational boundaries, and shareholder-oriented performance indicators in ways that inadequately reflect ecological limits and social consequences. Contemporary sustainability accounting research has therefore sought to reconsider the relationship between accounting systems and sustainable development, moving from perceptions of incompatibility toward more integrative approaches capable of supporting corporate sustainability [13]. Similarly, critical approaches to social and environmental accounting emphasize the need for accounting research to engage seriously with environmental realities, social consequences, institutional structures, and stakeholder concerns rather than treating sustainability exclusively as a technical disclosure issue [14]. These perspectives suggest that an effective green accounting framework must address not only measurement techniques but also organizational values, institutional structures, accountability mechanisms, stakeholder engagement, and the broader societal implications of corporate activity.

One of the most important mechanisms through which green accounting can influence organizational and societal outcomes is environmental disclosure. Disclosure allows stakeholders to evaluate whether organizations are identifying environmental risks, adopting appropriate environmental strategies, and accepting responsibility for the environmental consequences of their operations. The determinants of environmental accounting disclosure are multidimensional and can include regulatory pressures, organizational characteristics, stakeholder expectations, corporate governance, environmental performance, and managerial attitudes [15]. Recent evidence likewise indicates that the relationship between green accounting and sustainability reporting is increasingly important for assessing the quality and scope of corporate environmental disclosure practices [16]. Transparent environmental reporting can reduce information asymmetry, strengthen accountability, and enhance stakeholder confidence, but the usefulness of disclosure depends on whether information is sufficiently reliable, comparable, relevant, and integrated with broader organizational reporting systems.

The quality of environmental and sustainability reporting can also affect auditing and assurance processes. Organizations that disclose environmental sustainability information create additional information requirements for auditors, regulators, investors, and other users of corporate reports. Research within the context of listed companies has shown that environmental sustainability reporting may influence auditor effort and audit quality, highlighting the increasing interaction between sustainability information and conventional assurance mechanisms [17]. Integrated reporting has similarly emerged as an important development because it attempts to connect financial and non-financial information and provide a more comprehensive understanding of organizational value creation. Factors influencing integrated reporting demonstrate that organizational reporting systems increasingly need to capture multiple dimensions of performance, including environmental and social considerations [18]. These developments provide further justification for developing coherent green accounting frameworks capable of integrating environmental information with corporate reporting, accountability, and governance.

The organizational consequences of adopting green accounting may extend beyond transparency and disclosure. Green accounting can influence managerial decision-making by identifying environmental costs that might

otherwise remain hidden within overhead expenses, enabling managers to recognize inefficiencies in resource use and evaluate alternative investments. Environmental management accounting may also support green innovation by providing information necessary for evaluating environmentally oriented technologies, processes, and investments [9]. Moreover, green accounting has been linked to sustainable development in broader organizational and urban contexts, where environmental information can support resource efficiency, environmentally responsible planning, and sustainable development initiatives [19]. The effectiveness of green accounting therefore depends substantially on whether the information generated is actually incorporated into management decisions rather than being produced merely for symbolic or compliance-oriented reporting purposes.

Energy efficiency constitutes another important mechanism linking green accounting to environmental performance. Organizations that systematically identify environmental costs and measure energy use can more effectively recognize opportunities for reducing resource consumption and improving operational efficiency. Empirical evidence indicates that energy efficiency can mediate the relationship between green accounting and environmental performance, suggesting that accounting information becomes environmentally meaningful when it contributes to specific improvements in operational practices [20]. This relationship is particularly relevant because environmental accounting should ultimately support measurable environmental improvements rather than simply increasing the quantity of disclosed information. Therefore, an effective green accounting model should integrate measurement, reporting, monitoring, operational improvement, and environmental decision-making within a coherent framework.

The effectiveness of green accounting is also influenced by corporate governance and management characteristics. Managers determine the extent to which environmental information is incorporated into strategic planning, resource allocation, risk management, and organizational control. Managerial attitudes toward social responsibility may therefore influence both the quality of environmental practices and the extent to which organizations respond to stakeholder demands. Research has identified relationships among managerial overconfidence, social responsibility, organizational performance, and financial constraints, illustrating the importance of managerial characteristics in shaping corporate responsibility practices [21]. Similarly, environmental accounting strategies require managerial accountability mechanisms capable of transforming environmental objectives into concrete organizational practices [22]. This highlights the need for models of green accounting that incorporate accountability, organizational learning, managerial responsibility, reporting structure, and governance conditions rather than focusing exclusively on accounting procedures.

At the strategic level, organizations increasingly need to integrate environmental responsibility throughout their supply chains and operational networks. Green supply chain management research indicates that manufacturers face pressures, barriers, and performance considerations when implementing environmentally sustainable practices, emphasizing the importance of organizational capability, external pressure, managerial commitment, and institutional support [23]. These findings are important for green accounting because environmental impacts often arise across procurement, production, transportation, consumption, and disposal activities rather than within organizational boundaries alone. Accounting systems capable of tracking environmental resource flows and environmental costs can therefore support more comprehensive sustainability strategies. In addition, organizational sustainability increasingly requires integrated environmental management systems in which accounting, supply chain management, production processes, governance structures, and reporting systems operate in a coordinated manner.

The financial consequences of green accounting have also attracted considerable research attention. One important question is whether environmental accounting and disclosure can coexist with financial performance or whether environmental activities primarily create additional costs for firms. Recent empirical evidence suggests that green accounting and environmental disclosure can influence financial performance, although the magnitude and direction of these relationships may depend on organizational context, reporting quality, industry characteristics, and implementation effectiveness [24]. Green accounting may also influence firm value by improving environmental transparency, reducing environmental risks, strengthening stakeholder confidence, and supporting organizational legitimacy. Evidence from manufacturing firms has examined the influence of green accounting on firm value alongside other financial behaviors, illustrating the increasing relevance of environmental accounting to capital-market assessments [25]. These findings demonstrate that environmental accounting is becoming increasingly relevant not only to environmental management but also to financial strategy, investor evaluation, and corporate value creation.

Corporate sustainability, however, cannot be reduced to financial performance. Environmental responsibility also has important implications for society and public well-being. Organizations interact continuously with communities through employment, resource consumption, environmental emissions, production processes, infrastructure use, and the distribution of economic benefits and environmental burdens. Consequently, organizational environmental behavior can directly or indirectly influence social welfare, quality of life, public trust, and health-related conditions. Social responsibility therefore provides an important bridge between green accounting and social health by emphasizing that organizations have obligations to consider the consequences of their activities for individuals and communities. Environmental accounting can support these obligations by making environmental and social impacts more visible and by enabling organizations to design strategies that reduce environmental harm and generate broader social benefits. In this context, accounting becomes not merely a technical information system but also an institutional mechanism through which organizations can demonstrate responsibility toward society.

The concept of social health is particularly relevant to this perspective because environmental quality and social well-being are interconnected. Pollution, unsafe working and living environments, degradation of natural resources, and unequal exposure to environmental harms can negatively affect community welfare, whereas cleaner environments, sustainable resource use, responsible corporate behavior, and transparent stakeholder engagement can strengthen societal well-being. A social responsibility-based green accounting system can therefore extend the scope of environmental accounting by explicitly considering how corporate environmental activities affect stakeholders and communities. This orientation is consistent with efforts to reconceptualize green accounting outcomes beyond conventional financial indicators and move toward a broader accounting discourse concerned with sustainability, environmental responsibility, and social consequences [26]. It also corresponds with arguments that green accounting should provide mechanisms for improving organizational accountability and connecting environmental initiatives to broader social outcomes.

Technology may further transform the capacity of organizations to implement green accounting. Digital accounting systems, artificial intelligence, data analytics, automated environmental monitoring, and integrated information platforms increasingly enable organizations to collect and process large volumes of sustainability information. Artificial intelligence-based green management accounting models have recently been proposed as mechanisms for strengthening organizational resilience and sustainable performance, particularly among small and medium-sized enterprises [27]. Such technologies can potentially improve environmental cost identification,

resource monitoring, forecasting, sustainability reporting, and managerial decision-making. Nevertheless, technological tools must be embedded within appropriate organizational structures and accountability mechanisms if they are to generate meaningful sustainability improvements. Digitalization alone cannot ensure responsible environmental behavior unless accounting information is connected to governance, incentives, organizational culture, strategic planning, and stakeholder expectations.

Environmental and social responsibility can also influence organizational competitiveness and sector-specific performance. Research in environmentally sensitive sectors has demonstrated that corporate social responsibility and environmental management may influence organizational performance by shaping stakeholder relationships, operational practices, and strategic positioning [28]. From a broader perspective, organizations may derive competitive advantages from stronger sustainability performance through improved reputation, stakeholder loyalty, operational efficiency, risk management, and legitimacy. However, such benefits are more likely to emerge when sustainability practices are substantive, integrated, and supported by reliable accounting information. This reinforces the importance of green accounting systems that connect corporate environmental responsibility with performance measurement and social outcomes rather than treating environmental disclosure as an isolated reporting exercise.

Despite considerable progress in the green accounting literature, important conceptual and empirical gaps remain. Existing research has frequently focused on individual dimensions such as environmental disclosure, environmental performance, green innovation, financial outcomes, reporting practices, auditing, supply chain management, or corporate sustainability. For example, some studies have concentrated primarily on the distinctions between environmental and traditional accounting [1], while others have emphasized environmental disclosure [7], environmental management and auditing [8], sustainable organizational performance [5], or environmental and financial consequences [4]. Although these studies contribute substantially to understanding green accounting, comparatively limited attention has been devoted to comprehensive frameworks that simultaneously integrate green accounting, corporate social responsibility, organizational conditions, environmental pressures, governance characteristics, strategic actions, and social health outcomes.

This gap is particularly important in contexts where institutional structures, reporting standards, stakeholder pressures, environmental regulation, corporate governance, and social expectations differ from those of developed economies. Evidence from developing-country settings indicates that green accounting systems need to be adapted to local institutional and organizational conditions rather than simply replicating frameworks developed elsewhere [3]. Likewise, green accounting as a mechanism for achieving sustainable development may require alignment with national development priorities, regulatory arrangements, and organizational capacities [29]. A comprehensive model should therefore identify not only the central components of green accounting but also the causal conditions that encourage its development, the contextual and intervening conditions that facilitate or constrain implementation, the strategies through which organizations operationalize environmental responsibility, and the consequences that may result for accounting performance, environmental value, organizational decision-making, social responsibility, and social health.

Accordingly, there is a need for an empirically grounded framework capable of explaining how green accounting can be developed as a social responsibility-oriented system within the domain of social health. Such a framework should move beyond fragmented relationships among individual variables and provide a coherent representation of the organizational, financial, environmental, governance, social, and institutional mechanisms involved. It should also acknowledge that green accounting operates within a dynamic environment characterized by

regulatory pressures, stakeholder expectations, technological change, market competition, environmental risks, and increasing demand for transparency. By integrating these elements, it becomes possible to conceptualize green accounting not merely as an accounting technique but as a comprehensive organizational system that supports responsible decision-making, sustainable performance, environmental accountability, and improved relationships between organizations and society.

Therefore, the aim of the present study is to develop and validate a comprehensive green accounting model based on corporate social responsibility in the domain of social health by identifying its core phenomenon, causal conditions, contextual and intervening conditions, strategies, and consequences.

2. Methods and Materials

Philosophically, this study is situated within the interpretivist paradigm. In terms of the logic of inquiry, it follows an inductive approach; with respect to its purpose, it is an applied study; and in terms of research design, it employs a mixed-methods approach (qualitative–quantitative).

To develop the qualitative model, the Grounded Theory method was employed. The participants in this phase consisted of academic experts in the field of accounting who met the following criteria: holding a PhD in Accounting, being a university faculty member, and having at least 10 years of professional experience in Tehran or Shiraz. The sampling method was purposive judgmental sampling.

In this study, interviews constituted the primary source of data in the qualitative phase. The initial interviews were exploratory and descriptive in nature. Subsequently, following each interview, the interview data were coded sequentially, interview by interview. Through the constant comparative method, theoretical codes emerged through open coding. This process was continued throughout all 15 interviews, resulting in the emergence of concepts as well as subcategories and main categories. It should be noted that the density and saturation of the core categories were determined through theoretical sampling. Each interview lasted approximately 30 to 50 minutes.

For the analysis of the qualitative research data, Grounded Theory analysis was conducted using MAXQDA software. In this research design, the analysis of the collected qualitative data was carried out in three stages: open coding, axial coding, and selective coding.

The data collection instruments are presented in Table 1.

Table 1. Data collection tools

Section	Instrument	Data collection method	Technique.Method (Software)	Objective (Application)
Qualitative	Reporting (Interview)	Field research	Grounded Theory (MAXQDA)	Developing a green accounting model based on social responsibility in the realm of social health
Quantitative	Researcher-designed questionnaire with 93 questions	Field research	Confirmatory Factor Analysis (LISREL)	Validating the green accounting model based on social responsibility in the realm of social health

The statistical population of the quantitative phase of this study consisted of members of the Iranian Association of Certified Public Accountants (IACPA) in Tehran and Shiraz, including certified public accountants, self-employed practicing auditors, auditors, senior auditors, supervisors, senior supervisors, audit managers, and partners of audit firms who are members of the Association of Certified Public Accountants.

Since official statistics regarding the size of the population under study were not available, the statistical population was assumed to be **infinite**. Given the infinite population, the required sample size was calculated using the following formula:

$$n = \frac{Z_{\alpha/2}^2 \times p(1-p)}{\varepsilon^2} = \frac{(1/96)^2 \times 0.5 \times 0.5}{(0.05)^2} = 384$$

In this study, the confidence level is 95% ($\alpha = 0.05$) and precision (ε) was considered equal to 0.05. The standard deviation was also calculated according to the relationship $\sigma = \frac{5-1}{6}$, It was found to be 0.677. The questionnaire was distributed electronically.

Structural Equation Modeling (SEM) was employed in MAXQDA software to fit the model. Anticipating that some questionnaires might be unusable, 450 questionnaires were distributed, of which 404 were found to be usable.

The participants in both the qualitative and quantitative phases are described below.

Table 2 outlines the demographic characteristics of the experts involved in the qualitative and quantitative phases:

Table 2. Demographic characteristics of the interviewees.

Qualitative				A small portion			
Category	Category	Abundance	Percentage		Category	Abundance	Percentage
Gender	Sir	12	73.33	Gender	Woman	114	28.2
	miss	3	26.76		Man	290	71.8
Age	30-40	2	6.76	Age	Under 30 years old	30	7.4
	40-50	5	26.66		31 to 40 years old	120	29.7
	50-60	6	53.32		41 to 50 years old	173	42.8
	Over 60	2	13.33		51 and older	81	20
Education	Ph.D. in Accounting	15	100	Education	Bachelor's	131	32.4
					Bachelor's	107	31.4
					PhD	146	36.1
Total		15	100		Total	404	100

Based on the observed frequencies among the participants in the qualitative study, 73.33% of the participants were male and 26.76% were female. With respect to age, 53.32% of the qualitative participants were between 50 and 60 years old, 26.66% were between 40 and 50 years old, 13.33% were over 60 years old, and 6.76% were between 30 and 40 years old. Regarding educational attainment, the qualitative participants comprised 66.66% with doctoral degrees, 26.66% with master's degrees, and 6.66% with bachelor's degrees. In the quantitative phase, the participants with male gender, an age range of 41–50 years, and a doctoral degree had the highest frequencies.

3. Findings and Results

In the qualitative phase, the Grounded Theory approach of Strauss and Corbin (2008) was employed to develop a green accounting model based on social responsibility in the domain of social health. Accordingly, 15 interviews were conducted until theoretical saturation was achieved. The overall structure of the grounded theory is presented in Figure 1.

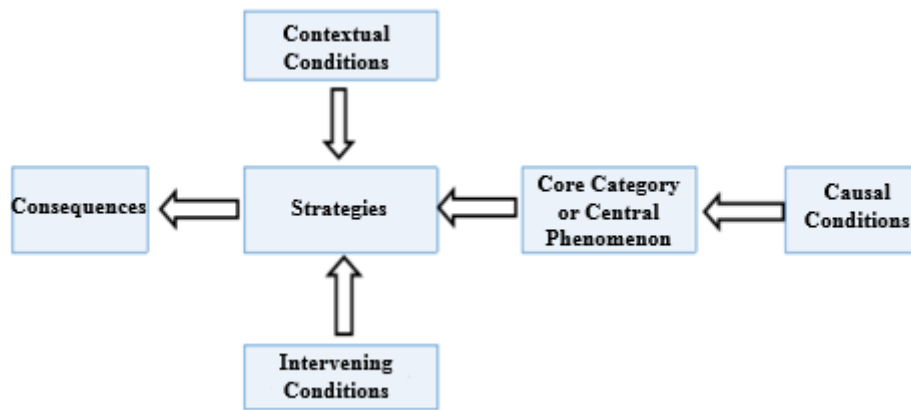


Figure 1: Strauss and Corbin's (2008) Paradigmatic Model

For open coding, all interviews were imported into MAXQDA software, where the necessary analyses were conducted and the relevant codes were extracted. The codes were labeled based on the interview data, and the researcher sought, to the extent necessary, to remain faithful to the participants' perspectives regarding their responses in order to minimize any potential and unintended bias.

Throughout the entire coding process, the researcher adhered to theoretical sensitivity, which is one of the fundamental principles of Grounded Theory methodology, in order to enrich the study as much as possible. Subsequently, based on the dimensions of the Strauss and Corbin (1998) Grounded Theory model, the identified codes were categorized and presented in Table 3.

Table 3. Initial codes, secondary codes, and categories of the social responsibility-based green accounting model in the realm of social health.

Category	Secondary Code	Primary Code
Core category	Development of a Green Accounting Framework	Designing green accounting principles and standards
		Integrating sustainability criteria into financial reporting
		Formulating green accounting guidelines for social well-being
		Aligning with international sustainability standards
	Enhancing Corporate Social Responsibility	Green and responsible organizational culture
		Promoting ethical values in financial processes
		Collaborating with stakeholders to enhance social well-being
		Establishing environmental social responsibility programs
	Social Well-being in Accounting	Assessing the social impact of corporate activities
		Developing social well-being indicators for reporting
		Developing green indicators for social welfare
		Integrating environmental and social data into financial
		Monitoring the impact of green initiatives on social well-being
		Implementing digital green accounting systems
Causal Condition	Financial factors	Optimal asset management
		Green financial management
		Environmental risk management

Strategies	Company financial reporting structure	Resource allocation for sustainability
		Adherence to international reporting standards
		Transparent and high-quality reporting
		Accountants' expertise in financial reporting
	Organizational accountability	Assessment of the social impact of reporting
		Fostering corporate responsibility and professionalism
		Improving accountability systems, standards, and procedures
		Financial and non-financial reporting with a sustainability
	Corporate learning	Green and social accountability
		Identifying organizational training needs
		Enhancing employees' specialized skills
		Increasing the number of specialists in specialized committees
	Structural and institutional strategies	Harmonizing the methods and tools of the green accounting
		Formulating unified green accounting standards
		Strengthening sustainable corporate governance
		Developing corporate policies that support sustainability
	Operational and executive strategies	Establishing regulatory infrastructure for green reporting
		Strengthening cooperation with international accounting bodies
		Transparent environmental and social disclosure
		Leveraging modern technologies
	Social and cultural strategies	Providing financial and environmental incentives
		Implementing environmental impact assessment systems
		Developing data-driven green accounting tools
		Continuously monitoring organizational environmental
Consequences	Accounting profit	Implementing public awareness campaigns
		Enhancing community participation in green initiatives
		Promoting a culture of environmental responsibility
		Creating interactive platforms for stakeholders
	Creating a Green Cycle	Enhancing public education on social health
		Developing corporate social responsibility programs
		Implementing dynamic activity-based costing
		Reducing production costs
	Optimizing Decision-Making	Reduction of social and environmental costs
		Management of resource recovery costing
		Identification of environmental opportunities and threats
		Creation of environmental value-added
	Environmental Values	Strengthening social standing through sustainability
		Increasing public trust
		Optimization of operational cost estimates
		Development of environmental information systems
Underlying conditions	Corporate structure characteristics	Strengthening carbon disclosure systems
		Decision-making based on social benefit
		Flexibility regarding changing standards
		Strengthening social accounting standards
		Reducing social inequality through sustainability
		Enhancing social transparency
	Corporate structure characteristics	Organizational culture
		Corporate R&D
		Corporate strategic planning
		Environmental reporting certifications
	Corporate structure characteristics	Managerial decisions

	Corporate governance characteristics	Organizational commitment to social welfare
		Ownership structure
		Board gender diversity
		Board independence
		Board's financial and accounting knowledge
	Environmental conditions	Government laws and regulations
		International standards
		Compliance with green accounting standards
		Social pressures for sustainability
		Stakeholder expectations regarding social well-being
	Intervening conditions	Customer expectations regarding the environment
		Focus on sustainable development
		Transparency and rapid access to information
		Societal concerns
		Environmental considerations
	Corporate policy	Market competition
		International pressures for sustainability
		Sustainability and transparency policies
		Combating bribery, corruption, and unethical behavior
		Monitoring and evaluating financial and social performance
		Setting strategic and operational goals
		Budgeting for environmental disclosure
		Developing green technologies
		Social health support policies
		Adopting green digital technologies

Figure (1) shows the initial and secondary codes of the core category:



Figure 1. Primary and secondary codes for the core category (research findings)

Figure (2) shows the primary and secondary codes for the causal conditions:

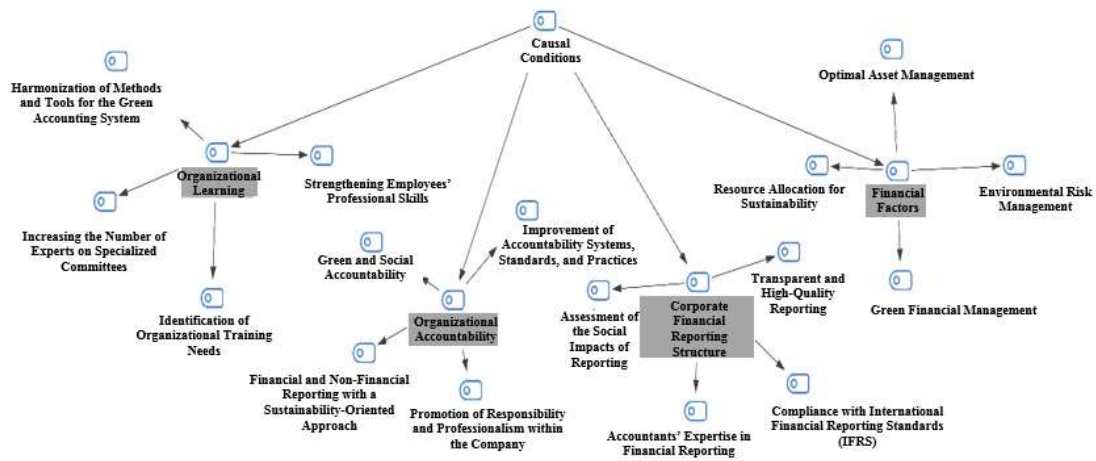


Figure 2. Primary and Secondary Codes of the Causal Conditions (Research Findings)

Figure 3. Primary and Secondary Codes of the Intervening Conditions

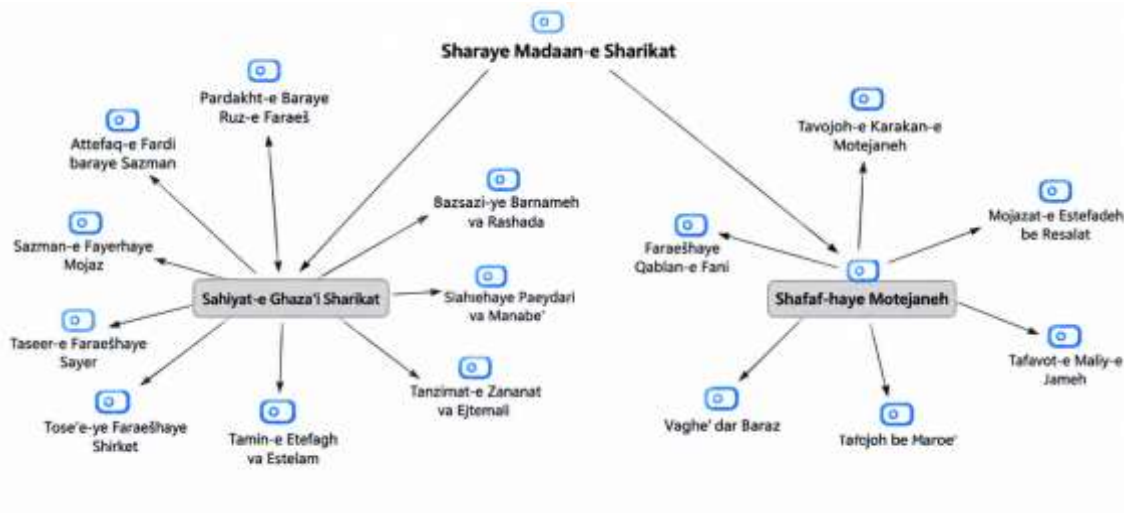


Figure 3. Primary and secondary codes for intervening conditions (research findings)

Figure (4) shows the primary and secondary codes for contextual conditions:

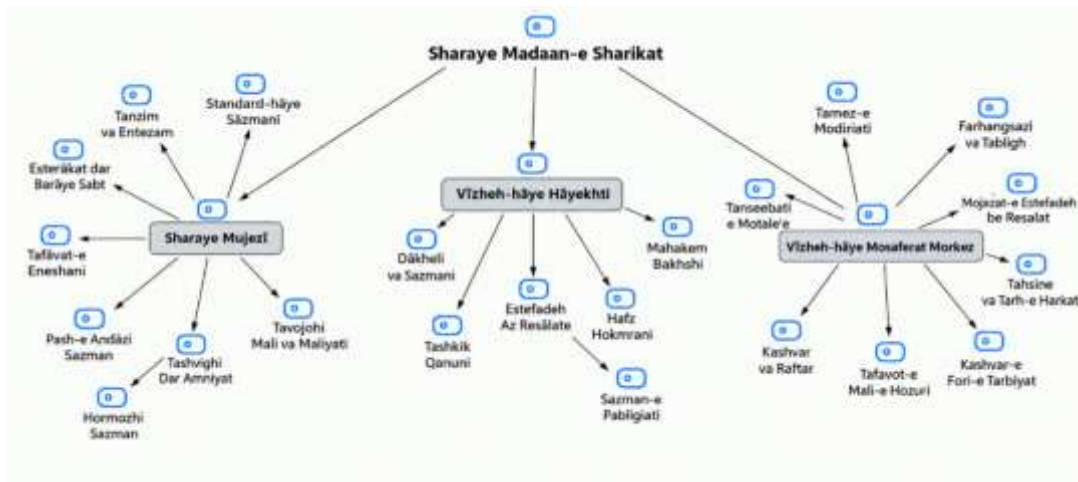


Figure 4. Primary and secondary codes for contextual conditions (research findings)

Figure (5) shows the primary and secondary codes for strategies:

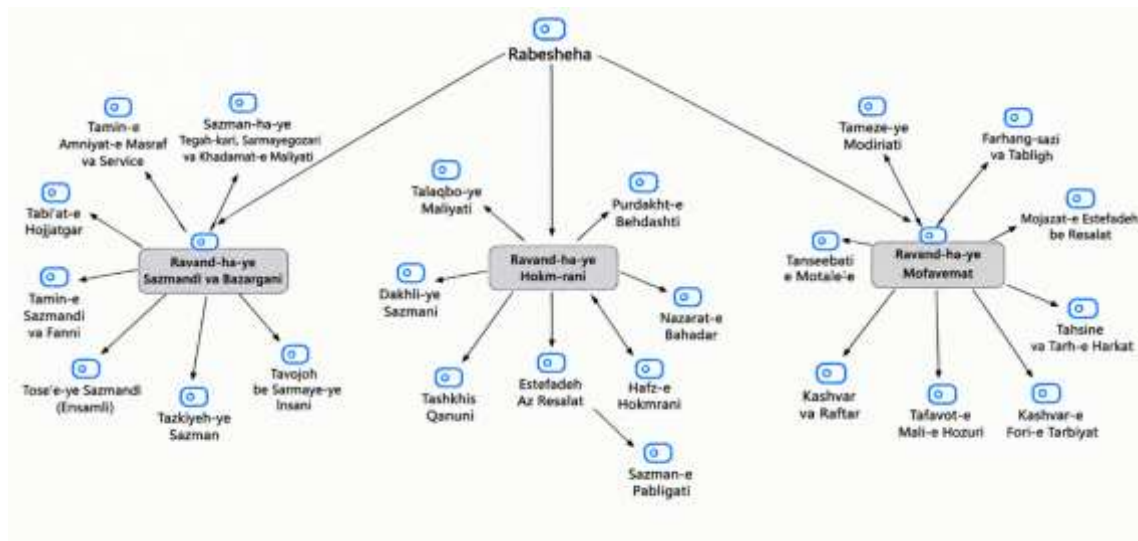


Figure 5. Primary and secondary codes for strategies (research findings)

Figure (6) shows the primary and secondary codes for consequences:

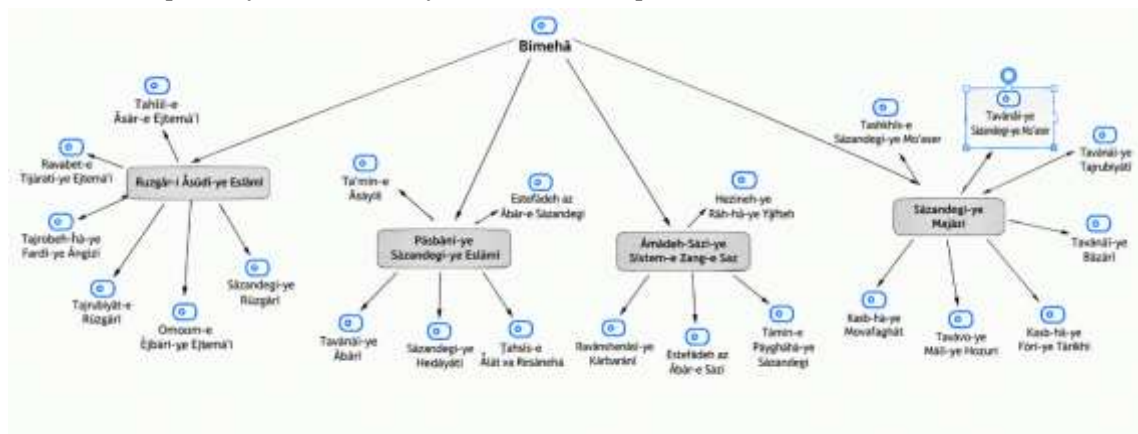


Figure 6. Primary and secondary codes for consequences (research findings)

Upon completion of the analysis and assessment of the various data, the final research model is presented in Figure 7:

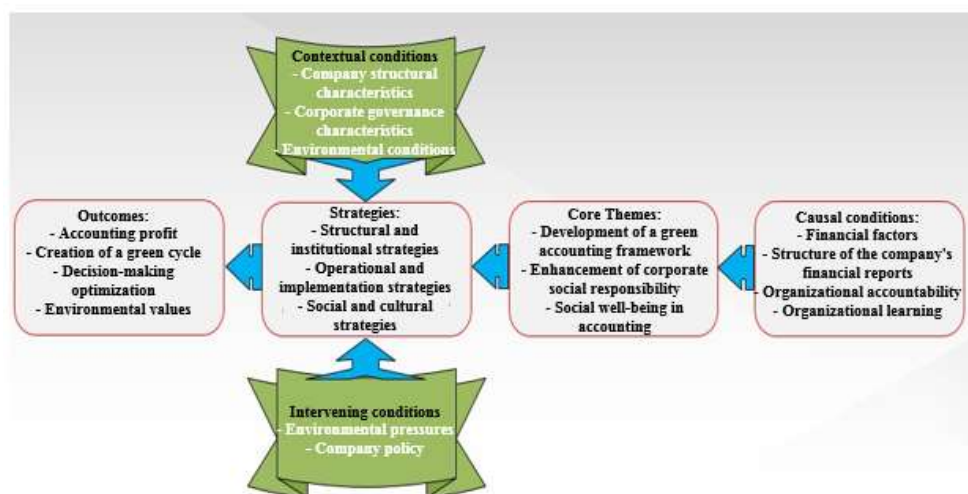


Figure 7: The final model of green accounting based on social responsibility in the realm of social health.

Although some researchers traditionally associate data and result validity primarily with quantitative studies, the reality is that the accuracy and validity of data and findings constitute a crucial part of the research process in qualitative studies as well. Researchers argue that new methods and concepts for assessing validity within the qualitative realm should be developed to replace quantitative validation tools and techniques. To this end, the following indicators are proposed: 1) **Credibility**: This refers to the authenticity of the research descriptions and findings (Hariri, 2006). To ensure the credibility of this study, the researcher employed prolonged and continuous observation. Furthermore, since data collection occurred in multiple phases—and given that some participants, due to their specialized knowledge and interest in the topic, were involved in at least two stages—the researcher had ample time to build rapport with them and obtain corrective feedback by sharing data analyses. 2) **Transferability**: This refers to the generalizability of results to other domains and contexts. However, since most qualitative studies are conducted with small groups, generalizing results in this field presents certain challenges.

To ensure the richness and comprehensiveness of the data, purposive and snowball sampling methods were employed in this study. Thus, at the conclusion of each interview, suitable candidates possessing deep knowledge of the topics under discussion were identified for the continuation of the data collection process. 3) **Confirmability**: This refers to the effort to establish objectivity in the research. In quantitative research, confirmability largely concerns the researcher avoiding bias; conversely, in qualitative research, it relates more to the strength of analysis, data accuracy, and the extent to which the findings can be corroborated. To ensure the confirmability of this study, simultaneous data collection and analysis were employed throughout the research (a process of constant comparative coding). To this end, the researcher systematically recorded and maintained all raw data—including key points from documents, recorded interviews, and personal reflections and analyses—ensuring they could be revisited and reviewed at any time. 4) **Reliability**: This corresponds to "reliability" in quantitative methods. Assessing reliability is crucial for ensuring consistency in qualitative research. Reliability refers to the degree to which data can be replicated or reproduced by others (Hariri, 2006). In the present study, in addition to organizing structured processes for recording, documenting, and interpreting data, a steering committee was utilized to evaluate and oversee the implementation of the interview plan.

Subsequently, Confirmatory Factor Analysis (CFA) was conducted using LISREL software to validate the proposed model. As shown in Table (4), all factor loadings in the standardized estimation exceed 0.40; furthermore, based on the t-statistic values—which all fall outside the range of -1.96 to +1.96—it can be concluded that the factor loadings are significant at the 0.05 confidence level.

Table 4. Factor loadings

Categories	Secondary code	Factor loading	Source code	Factor loading
Core category	Development of a Green Accounting Framework	0.72	Designing green accounting principles and standards	0.82
			Integrating sustainability criteria into financial reporting	0.87
			Formulating green accounting guidelines for social well-being	0.94
			Alignment with international sustainability standards	0.92
	Enhancing Organizational Social Responsibility	0.81	A green and responsible organizational culture	0.92
			Promoting ethical values in financial processes	0.65
			Engaging with stakeholders to promote social well-being	0.87
			Establishing environmentally focused social responsibility programs	0.74
	Social Well-being in Accounting	0.68	Assessing the social impacts of corporate activities	0.76
			Developing social health indicators for reporting purposes	0.81
			Developing green indicators for social well-being	0.85

Causal Conditions	Financial factors	0.66	Integrating environmental and social data into financial statements	0.87
			Monitoring the impact of green initiatives on social health	0.88
			Implementing digital green accounting systems	0.75
			Optimal asset management	0.82
			Green financial management	0.78
			Environmental risk management	0.94
	Company financial reporting structure	0.61	Resource allocation for sustainability	0.92
			Compliance with international reporting standards	0.74
			Transparent and high-quality reporting	0.85
			Accountants' expertise in financial reporting	0.85
	Organizational accountability	0.83	Assessing the social impacts of reporting	0.87
			Fostering corporate accountability and professionalism	0.78
			Improving accountability systems, standards, and procedures	0.85
			Financial and non-financial reporting with a sustainability approach	0.94
	Organizational Learning	0.81	Green and social accountability	0.85
			Identifying organizational training needs	0.72
			Enhancing employees' specialized skills	0.76
			Increasing the number of specialists in specialized committees	0.82
			Harmonizing green accounting system methods and tools	0.96
Strategies	Structural and Institutional Strategies	0.66	Developing unified green accounting standards	0.59
			Strengthening sustainable corporate governance	0.67
			Developing corporate policies that support sustainability	0.88
			Establishing regulatory infrastructure for green reporting	0.80
			Strengthening cooperation with international accounting bodies	0.84
	Operational and Implementation Strategies	0.81	Transparent environmental and social disclosure	0.79
			Leveraging innovative technologies	0.77
			Providing financial and environmental incentives	0.85
			Implementing environmental impact assessment systems	0.86
			Developing data-driven green accounting tools	0.89
			Continuous monitoring of organizational environmental	0.77
	Social and Cultural Strategies	0.71	performance	0.82
			Implementation of public awareness campaigns	0.85
			Strengthening community participation in green initiatives	0.84
			Promoting a culture of environmental responsibility	0.82
			Creating interactive platforms for stakeholders	0.81
Consequences	Accounting Profit	0.70	Enhancing public education on social health	0.81
			Dynamic Activity-Based Costing	0.83
			Reduction of production costs	0.87
			Reduction of social and environmental costs	0.95
	Creating a Green Cycle	0.85	Management of resource recovery costs	0.91
			Identification of environmental opportunities and threats	0.92
			Creation of environmental value-added	0.62
			Strengthening social standing through sustainability	0.81
	Decision-making optimization	0.69	Increasing public trust	0.86
			Optimizing operational cost estimation	0.76
			Developing environmental information systems	0.77
			Strengthening carbon disclosure systems	0.89
	Environmental values	0.52	Socially-oriented decision-making	0.69
			Flexibility regarding changing standards	0.65

Contextual conditions	Corporate structure characteristics	0.81	Strengthening social accounting standards	0.80
			Enhancing social transparency	0.88
			Organizational culture	1
			Corporate research and development	0.81
			Corporate R&D	0.83
			Corporate strategic planning	0.88
			Environmental reporting certifications	0.84
	Corporate governance characteristics	0.99	Managerial decisions	0.87
			Organizational commitment to social welfare	0.82
			Ownership structure	0.77
			Board gender diversity	0.80
	Environmental conditions	0.60	Board independence	0.89
			Board financial and accounting literacy	0.76
			Government laws and regulations	0.73
			International standards	0.82
			Adherence to green accounting standards	0.87
			Social pressures for sustainability	0.82
			Stakeholder expectations regarding social well-being	0.82
Intervening conditions	Environmental pressures	0.79	Customer expectations regarding the environment	0.83
			Focus on sustainable development	0.67
			Transparency and rapid access to information	0.61
			Societal concerns	0.64
			Environmental considerations	0.56
			Market competition	0.69
			International pressures for sustainability	0.66
	Corporate policy	0.81	Sustainability and transparency policies	0.57
			Combating bribery, corruption, and unethical behavior	0.65
			Monitoring and evaluating financial and social performance	0.63
			Setting strategic and operational goals	0.72
			Budgeting for environmental disclosure	0.63
			Development of green technologies	0.67
			Policies supporting social well-being	0.70
			Adoption of green digital technologies	0.66

Table (5) presents the composite reliability, average variance extracted, and results of the convergent construct validity assessment for the organizing and global themes:

Table 5. Values of CR, AVE, and convergent construct validity.

Secondary Codes.Categories	Composite validity	Average Variance Extracted	Convergent construct validity
Core Category	0.782	0.545	Confirm
Developing a green accounting framework	0.924	0.753	Confirm
Enhancing organizational social responsibility	0.876	0.643	Confirm
Social well-being in accounting	0.925	0.675	Confirm
Causal Conditions	0.924	0.753	Confirm
Financial factors	0.821	0.538	Confirm
Corporate financial reporting structure	0.898	0.678	Confirm
Organizational accountability	0.917	0.734	Confirm
Corporate learning	0.890	0.673	Confirm
Strategies	0.772	0.532	Confirm
Structural and institutional strategies	0.873	0.583	Confirm

Operational and executive strategies	0.926	0.677	Confirm
Social and cultural strategies	0.928	0.684	Confirm
Consequences	0.789	0.490	Confirm
Accounting profit	0.925	0.757	Confirm
Creating a green cycle	0.882	0.657	Confirm
Decision-making optimization	0.861	0.610	Confirm
Environmental values	0.905	0.709	Confirm
Contextual conditions	0.852	0.665	Confirm
Corporate structure characteristics	0.936	0.709	Confirm
Corporate governance characteristics	0.881	0.651	Confirm
Environmental conditions	0.923	0.666	Confirm
Intervening conditions	0.781	0.640	Confirm
Environmental pressures	0.805	0.409	Confirm
Corporate policy	0.857	0.429	Confirm

As shown in Table (5), the composite reliability values for the model exceed 0.7, indicating the satisfactory reliability of the proposed model. Furthermore, given that the factor loadings for the indicators (listed in Table 2) are significant and exceed 0.4, and the Average Variance Extracted (AVE) value is greater than 0.4, convergent construct validity is confirmed for all secondary codes/categories. Table (6) presents the goodness-of-fit indices for the confirmatory factor analysis model:

Table 6. Fit indices for confirmatory factor analysis models.

Model	GFI	NFI	IFI	CFI	RMSEA	Chi ² .df
Core category	0.90	0.96	0.98	0.98	0.069	1.67
Contextual conditions	0.90	0.97	0.99	0.99	0.056	1.44
Causal conditions	0.90	0.97	0.99	0.99	0.054	1.41
Intervening factors	0.91	1	1	1	0.061	1.81
Strategies	0.90	0.96	0.98	0.98	0.064	1.58
Consequences	0.90	0.95	0.98	0.98	0.058	1.46
Acceptable value	90>=	90>=	90>=	90>=	0.08<	3<

Given that the fit indices presented in Table (6) show acceptable values, it can be stated that the confirmatory factor analysis model demonstrates a satisfactory level of fit.

4. Discussion and Conclusion

The present study sought to develop and validate a green accounting model based on corporate social responsibility in the domain of social health. The qualitative findings demonstrated that the proposed model comprised six major dimensions: the core category, causal conditions, contextual conditions, intervening conditions, strategies, and consequences. Within the core category, three major components emerged: development of a green accounting framework, enhancement of organizational social responsibility, and incorporation of social health into accounting. The causal conditions included financial factors, corporate financial reporting structure, organizational accountability, and organizational learning. Contextual conditions consisted of corporate structural characteristics, corporate governance characteristics, and environmental conditions, while intervening conditions were represented by environmental pressures and corporate policymaking. The strategies were organized into structural and institutional, operational and executive, and social and cultural strategies. Finally, the consequences comprised accounting profit, creation of a green cycle, optimization of decision-making, and environmental values. The quantitative phase further supported the proposed structure, as the confirmatory factor analysis indicated

acceptable factor loadings, satisfactory composite reliability, acceptable convergent validity, and appropriate model-fit indices. These results indicate that green accounting based on social responsibility should be regarded as a multidimensional organizational system rather than as a narrow environmental reporting technique.

One of the central findings was the importance of developing a coherent green accounting framework as part of the core category. This component included establishing green accounting principles and standards, integrating sustainability criteria into financial reporting, formulating guidelines for social well-being, and aligning accounting practices with international sustainability standards. This result is consistent with the argument that green accounting represents a distinct extension of conventional accounting because it incorporates environmental costs, ecological consequences, and sustainability information into organizational decision-making and reporting processes [1]. The finding also corresponds with Toke and Kalpande's emphasis on the necessity of structured green accounting and reporting practices for improving the environmental accountability of organizations [2]. Similarly, Gonzalez and Peña-Vinces showed that developing-country contexts require systematic and context-sensitive green accounting frameworks that integrate environmental indicators into management and reporting systems [3]. Therefore, the prominence of the green accounting framework in the present model indicates that environmental responsibility cannot become institutionalized unless it is translated into clearly defined standards, reporting mechanisms, measurement procedures, and decision-support systems.

The second component of the core category, enhancement of organizational social responsibility, further demonstrates that green accounting cannot be separated from the wider social obligations of organizations. The identified indicators, including the development of a green and responsible organizational culture, promotion of ethical values in financial processes, stakeholder participation, and establishment of environmentally oriented social responsibility programs, show that accounting practices are embedded within the ethical and social orientation of the organization. This finding is aligned with studies emphasizing that contemporary corporate responsibility encompasses not only economic obligations but also environmental and social responsibilities toward stakeholders and society [10]. The broader ESG literature similarly shows that environmental, social, and governance factors have become increasingly important in corporate investment, sustainability, and value creation [12]. Moreover, research on the relationship between social responsibility and corporate outcomes suggests that responsible behavior may strengthen organizational legitimacy and stakeholder relationships and thereby influence organizational performance [11]. In this regard, the present findings suggest that green accounting can serve as an operational mechanism through which social responsibility is transformed from a general organizational commitment into measurable practices, disclosures, and accountability processes.

The emergence of social health in accounting as another component of the core category constitutes an important contribution of the proposed model. The indicators associated with this component included assessment of the social impacts of corporate activities, development of social health and green indicators, integration of environmental and social information into financial statements, monitoring the effects of green initiatives on social well-being, and implementation of digital green accounting systems. This finding suggests that the consequences of organizational environmental behavior extend beyond ecological conditions and can influence broader dimensions of social well-being. Hossein Pouran et al. argued for a broader conceptualization of green accounting outcomes that moves beyond the conventional positivist accounting paradigm and incorporates the wider consequences of organizational environmental activities [26]. Baker et al. similarly emphasized that the relationship between accounting and sustainability increasingly requires greater integration between conventional accounting systems and broader societal and ecological considerations [13]. From this perspective, incorporating social health

into accounting extends the information function of accounting by requiring organizations to recognize how environmental actions and corporate policies may influence communities and social welfare.

The causal conditions identified in the present study also provide important insights into the organizational foundations of green accounting. Financial factors included optimal asset management, green financial management, environmental risk management, and resource allocation for sustainability. These findings support the view that the implementation of green accounting requires financial resources and deliberate managerial decisions concerning how those resources are allocated. Environmental management accounting can help organizations identify hidden environmental costs, improve resource efficiency, and evaluate environmental investments, thereby contributing to financial, environmental, and economic performance [9]. In addition, the positive relationship between green accounting and environmental performance may partly operate through greater energy efficiency, demonstrating how accounting information can support more efficient resource utilization [20]. Empirical evidence also indicates that environmental accounting can improve organizational performance by facilitating more informed environmental and managerial decision-making [4]. Accordingly, the current findings reinforce the idea that green accounting requires the integration of environmental considerations into financial planning rather than treating environmental expenditure as an isolated organizational cost.

Corporate financial reporting structure was another major causal factor. Its identified indicators included adherence to international standards, transparent and high-quality reporting, accountants' expertise, and evaluation of the social consequences of reporting. This result is consistent with previous research demonstrating that sustainability and environmental information increasingly affect the architecture of corporate reporting. Integrated reporting research has indicated that organizational, governance, and information-related factors influence organizations' capacity to combine financial and non-financial information within comprehensive reporting systems [18]. Environmental sustainability reporting can also influence audit effort and audit quality because reporting environmental information imposes additional requirements for verification, professional judgment, and assurance [17]. Moreover, recent research on sustainability reporting emphasizes the growing need for corporations to improve the quality and transparency of environmental disclosures [16]. Therefore, the significance of financial reporting structure in the present model demonstrates that successful green accounting depends not only on collecting environmental data but also on embedding such data within credible and professionally governed reporting processes.

Organizational accountability and organizational learning were also identified as important causal conditions. Organizational accountability comprised professional responsibility, strengthening accountability procedures, sustainability-oriented financial and non-financial reporting, and green and social accountability. This finding is in line with the model developed by Aghabeygi Nasrollah Abadi et al., who emphasized the close relationship between environmental accounting strategies and managerial accountability [22]. Accountability is particularly significant because environmental accounting information has limited value if managers are not responsible for responding to environmental outcomes. Furthermore, organizational learning, including identification of training needs, development of specialized expertise, expansion of expert committees, and harmonization of green accounting tools, indicates that the implementation of green accounting requires organizational knowledge and professional competence. The growing complexity of environmental accounting means that accountants and managers increasingly need interdisciplinary knowledge related to sustainability, environmental performance, reporting standards, and information technologies.

The findings concerning contextual conditions revealed that organizational structure, corporate governance, and the external environmental context affect the implementation of green accounting. Corporate structural characteristics included organizational culture, research and development, strategic planning, environmental reporting certifications, managerial decisions, and organizational commitment to social welfare. This finding is compatible with research demonstrating that the implementation of environmental practices is influenced by internal organizational capabilities and managerial commitment. Kalpande and Toke showed that organizational pressures, barriers, and managerial practices play important roles in the adoption of green supply chain management and sustainable development practices [23]. Similarly, green accounting and environmental management practices need to be integrated with strategic planning and organizational culture rather than being treated as isolated technical functions.

Corporate governance characteristics, including ownership structure, board diversity, board independence, and board financial and accounting knowledge, also emerged as important contextual elements. This finding is theoretically reasonable because boards of directors influence sustainability strategy, managerial oversight, accountability, and organizational risk management. The increasing importance of ESG considerations further supports the relevance of governance structures to environmental and social performance [12]. Ruiz-López et al. also demonstrated that environmental management and corporate social responsibility can influence organizational performance, particularly in environmentally sensitive sectors, emphasizing the role of organizational governance in determining the effectiveness of such practices [28]. Consequently, corporate governance may provide the institutional oversight necessary for ensuring that green accounting information is actually used in strategic decision-making and organizational control.

Environmental conditions were likewise identified as a contextual factor and included government laws and regulations, international standards, compliance with green accounting standards, social pressures, stakeholder expectations concerning social well-being, and customer environmental expectations. This result is consistent with the literature on environmental accounting disclosure, which identifies regulatory pressure, stakeholder expectations, organizational characteristics, and external institutional forces as important determinants of environmental reporting [15]. Environmental accounting disclosure practices among manufacturing firms have similarly been shown to reflect organizational responses to growing accountability expectations [7]. These findings indicate that green accounting is not implemented in an institutional vacuum; rather, its development depends substantially on regulatory systems, social demands, market expectations, and internationally evolving sustainability standards.

The intervening conditions identified in this study comprised environmental pressures and corporate policymaking. Environmental pressures included sustainable development priorities, information transparency, societal concerns, environmental considerations, competition, and international pressures. Such factors can either accelerate or constrain the transition toward green accounting. The importance of environmental pressure is consistent with research showing that firms in environmentally sensitive sectors face increasing demands to demonstrate environmental responsibility and improve sustainability-related performance [6]. Moreover, green accounting has been linked to sustainable development objectives by creating mechanisms through which environmental costs and outcomes can be systematically monitored [29]. The current findings therefore suggest that external pressures can act as catalysts for organizational transformation when firms respond by incorporating environmental criteria into accounting and management systems.

Corporate policymaking was another intervening dimension and included sustainability and transparency policies, anti-corruption measures, financial and social performance monitoring, strategic goal setting, budgeting for environmental disclosure, green technology development, social health support policies, and adoption of digital technologies. This finding highlights the role of internal policy in converting environmental intentions into institutionalized practices. The association between management characteristics, social responsibility, performance, and financial constraints identified by Shaghaghi and Moshayekh demonstrates that managerial orientations and organizational policies can shape the implementation of socially responsible practices [21]. Likewise, environmental auditing can strengthen monitoring and control systems and thereby support the implementation of environmental management policies [8]. In the current model, corporate policymaking appears to operate as a mechanism connecting external pressures with actual organizational responses.

The strategies emerging from the study were categorized as structural and institutional, operational and executive, and social and cultural strategies. Structural and institutional strategies included unified green accounting standards, sustainable corporate governance, supportive organizational policies, regulatory infrastructure, and cooperation with international accounting organizations. These findings strongly correspond with prior arguments that effective environmental accounting requires formal standards and organizational support systems [2]. Operational and executive strategies included transparent disclosure, modern technologies, financial and environmental incentives, environmental impact assessment systems, data-driven accounting tools, and continuous environmental monitoring. This emphasis on technological and operational capacity is consistent with recent efforts to integrate artificial intelligence with green management accounting for improving resilience and sustainable performance [27]. Digital tools may enhance the speed, accuracy, and analytical value of environmental data, but their effectiveness depends on appropriate organizational governance and reliable data infrastructures.

Social and cultural strategies included public awareness, community participation, promotion of environmental responsibility, stakeholder interaction, education concerning social health, and development of corporate social responsibility programs. These findings show that the effectiveness of green accounting extends beyond accounting departments and depends partly on the organization's relationships with stakeholders and communities. Critical social and environmental accounting research has emphasized the importance of engagement, reflexivity, and meaningful interaction with real-world social and environmental problems [14]. Therefore, green accounting should not be restricted to internally generated numerical measures; it should also support broader communication, participation, and accountability processes involving communities and stakeholders.

Finally, the identified consequences demonstrate the potential organizational and societal value of the proposed model. Accounting profit included dynamic activity-based costing, reduced production costs, reduced environmental and social costs, and improved resource recovery costing. These findings are consistent with evidence suggesting that green accounting can contribute to financial performance by improving efficiency and environmental cost management [24]. Research on manufacturing firms has similarly investigated the contribution of green accounting to firm value, suggesting that environmental accounting may carry economic implications beyond regulatory compliance [25]. The creation of a green cycle, including identification of environmental opportunities and threats, generation of environmental value added, enhancement of social position, and increased public trust, indicates that green accounting may strengthen both resource efficiency and organizational legitimacy. Decision-making optimization, including environmental information systems and socially oriented decision-making, further confirms that the principal value of green accounting lies in its capacity to generate actionable

information. Overall, the results suggest that green accounting based on social responsibility can simultaneously contribute to financial management, environmental sustainability, social accountability, and social health when implemented as an integrated organizational system rather than a fragmented reporting mechanism.

The present study has several limitations that should be considered when interpreting its findings. The qualitative phase relied on a relatively limited group of experts, and the participants were drawn from specific professional and academic contexts, which may restrict the transferability of the qualitative findings to other institutional or industrial environments. The quantitative phase was also geographically restricted to respondents from Tehran and Shiraz and relied on self-reported questionnaire data, which may be affected by response tendencies and participants' subjective perceptions. In addition, the study validated the proposed model through confirmatory factor analysis but did not longitudinally examine how implementation of the model changes organizational, environmental, or social outcomes over time. Because green accounting and sustainability reporting are rapidly evolving areas, technological, regulatory, and professional developments may also modify the relative importance of some components identified in the model.

Future research should test the proposed model in different industries, organizational sizes, geographic regions, and institutional settings to assess its generalizability and identify possible sector-specific differences. Researchers could employ longitudinal designs to investigate whether the adoption of the proposed green accounting framework produces measurable changes in environmental performance, social health indicators, stakeholder trust, organizational reputation, and financial performance over time. Comparative studies between environmentally sensitive and less environmentally intensive industries may also provide greater insight into the contextual importance of the identified components. Future studies could additionally examine potential mediating and moderating relationships among organizational learning, corporate governance, environmental pressures, green technologies, and sustainability outcomes. The incorporation of objective environmental indicators, archival financial data, carbon emissions, energy consumption, waste generation, and stakeholder-based social health indicators would also strengthen future empirical evaluations of the model.

From a practical perspective, organizations should establish an integrated green accounting system that connects environmental information with financial reporting, strategic planning, corporate governance, risk management, and social responsibility programs. Specialized sustainability or green accounting committees can be established to oversee environmental measurement, reporting quality, and compliance with relevant standards. Organizations should also invest in professional training for accountants and managers, adopt digital environmental information systems, use data-driven dashboards for continuous monitoring, and develop clear indicators for environmental and social performance. Transparent disclosure of environmental and social impacts should be accompanied by effective internal control and independent assurance mechanisms. At the policy level, regulators and professional accounting bodies should work toward harmonized green accounting standards, clearer disclosure requirements, and incentive mechanisms that encourage firms to invest in environmentally responsible technologies and practices. Finally, companies should actively involve employees, customers, local communities, and other stakeholders in sustainability initiatives so that green accounting operates not merely as a reporting mechanism, but as a practical instrument for strengthening environmental responsibility, organizational accountability, and social well-being.

Authors' Contributions

Authors equally contributed to this article.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

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Conflict of Interest

The authors report no conflict of interest.

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