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Green accounting standards and environmental sustainability in Alkharj: Mediating role of social performance

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The Climate Disclosure Standards Board (CDSB) initiated the standards for sustainability and transparency in corporate reporting, which may be termed Green Accounting Standards (GAS). GAS encourages sustainable decision-making among businesses and practitioners. The present study explores the role of GAS on environmental sustainability in the firms located in the Alkharj governorate. Moreover, the mediating of social performance is also investigated in the relationship between GAS and environmental sustainability. For this purpose, a questionnaire is used to collect the data from accounting practitioners, and 224 valid responses are collected from the survey. The results of PLS-SEM show that GAS improves the environmental sustainability and social performance of the firms. Moreover, social performance also improves environmental sustainability. Thus, GAS promotes resource efficiency by tracking resource use and waste generation, which could be helpful in identifying opportunities for reducing environmental footprints. Thus, it also facilitates monitoring environmental performance in Alkharj to identify the areas needing improvement. Furthermore, GAS also improves social performance by recognizing social costs and engaging stakeholders, which are also facilitating more socially responsible decisions. Based on the results, the study recommends the firms in Alkharj governorate adopt GAS to improve environmental sustainability and social performance.

1. Introduction

The Climate Disclosure Standards Board (CDSB) is gearing the financial reporting with some highest standards to promote sustainability and transparency in corporate reporting. The significant target of CDSB is to enforce standards, which motivate the firms to include environmental and social indicators in their releases. By putting pressure on firms to disclose environmental and social indicators, the CDSB promotes transparency in financial reporting (CDSB, 2022). These initiatives would serve investors, stakeholders, and the government. Environmental and social indicators would be responsible for risks to businesses if not taken care of. For example, climate change might enforce regulatory changes, physical risks due to extreme weather events, and reputational risks, if environmental standards are not considered in decision-making. Therefore, firms would perform better in the domain of risks by disclosing environmental and social dimensions and adapting policies to changing circumstances. In this way, firms can enhance investor confidence and attract capital from socially responsible investors by including environmental and social performances in their financial reporting. Thus, environmental and social issues might enhance the long-term sustainability of the firms and would enhance value creation. By disclosing these indicators, firms might demonstrate their commitment to sustainable practices, to enhance long-term value creation in the minds of all stakeholders. At the macro level, many countries have started the implementation of these regulations. By enforcing financial standards, the CDSB could help firms to comply with regulatory requirements and to promote consistency

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in financial reporting. For this purpose, CDSB's standards proposed environmental and social indicators to report in the financial documents.

Following CDSB recommendations, there has been a huge increase in environmental care. Firms have started to care about environmental sustainability at a super important level to protect nature and ecology to protect the interests of societies, economies, and regulations. In turn, it has pushed governments, businesses, and organizations around the globe to be eco-friendly. For this purpose, environmental accounting, by following GAS, aims to track all the environmental costs and impacts in the regular accounting methods (Dhar et al., 2022). It helps the firms to make smarter decisions to manage risks in a better way and to keep everyone involved in the loop. Therefore, firms are really taking care of the environment seriously. Thus, firms are setting up special departments for environmental accounting to care the environment-related issues (Maama & Appiah, 2019). These departments could make sure the environmental concerns in every aspect of firms' matters, which has helped them to build a culture of caring about the environment in their financial reporting as well.

At the global level, firms are realizing the issue of environmental problems as their highest priority, which is not only because of pressure from laws and regulations but is also a social requirement and a pressure from social point of view to protect the planet from pollution (O'Higgins & Thevissen, 2017). For this purpose, the firms have specialized departments to focus on environmental issues and GAS are becoming so important in this regard. These departments are helping the firms perform in a better way about environmental problems. Firms are facing environmental challenges to protect themselves from polluting activities to reduce their impact on climate change. The firms are doing these cares to protect themselves from any damages out of environmental regulations and to remain free from social pressures.

Following GAS, environmental accounting is a way to figure out and manage environmental problems and costs. By employing environmental issues in regular financial and management accounting, the firms can watch environmental problems stemming from business activities to find places to improve. Thus, in turn, firms might approach smarter choices with fewer environmental problems. Moreover, running special departments for caring about environmental issues from business activities can make the firms eco-friendly in the eyes of both inside and outside firms' stakeholders. Thus, firms should encourage employees to think about the environment in every activity (Mackey et al., 2007). Nonetheless, making decisions to protect the environment can be complicated. However, environmental accounting could help firms in making smart environmental decisions. Firms are collecting data from investors, managers, and regular consumers for policymaking purposes to understand the environmental needs of all firms' stakeholders, which could them to understand how different activities impact the environment and make choices that help the planet to be safe from environmental issues. Nowadays, investors prefer to invest the firms, that are eco-friendly in the long term. Thus, managers are finding ways to save money and be more efficient in environmental performance. Moreover, policymakers are also interested in these firms to support those who are eco-friendly and to float environmentally friendly regulations.

On the management side, environmental accounting is the key tool for making good decisions to protect the environment and the associated costs with it. Thus, GAS would also help the firms to perform better in their economic performance by reducing unexpected cost burdens because of breaking environmental standards (Koapaha, 2024). However, getting reliable information about environmental costs can be a tough task, which makes it harder to follow GAS to make the right decisions. That is a reason to be aware of the importance of being transparent about the environmental cost. The environmental costs in financial reports would help all firms' stakeholders to understand an organization's real financial situation after caring about environmental issues. The environmental costs in financial reports would display all of the organization's activities, which might affect the environment. This would also help the investors, regulators, and other business stakeholders to see the organization's future perspective in a true manner. Thus, firms should display honestly the real value of the firms so that everyone should have a clearer picture and trust in the firm's performance.

The above discussions realize the importance of GAS in determining the environmental performance of a firm, which would also help in enhancing economic and social performance by reporting the true data about the environment in financial reporting. The global literature has gained a lot of popularity in investigating GAS and their relationship with environmental sustainability in recent years (Astuti et al., 2022a; Cho & Patten, 2013; Egbunike & Okoro, 2018; Endiana et al., 2020). However, this issue could catch less attention in Saudi literature and particularly is missing the case of Alkharj governorate, which is an industrial hub of the country and might have many environmental problems due to extensive manufacturing units. Thus, the present research is going to contribute to the Alkharj accounting literature by investigating the relationship between GAS and environmental sustainability in the Alkharj governorate by collecting survey-based primary data. In addition, the mediating effects of social performance in the relationship between GAS and environmental sustainability were also investigated to ensure an empirical and theoretical contribution to the Alkharj accounting literature. Understanding the mediating effect of social performance is very important to understand the social initiatives of firms in Alkharj governorate and to test the effectiveness of such initiatives effectiveness and GAS in promoting environmental sustainability. By investigating these relationships and addressing this research gap, this study claims a contribution to the existing literature by providing comprehensive mechanisms, that would help the firms located in Alkharj to enhance their environmental sustainability practices through GAS and social performance.

2. Literature Review

Environmental challenges in the accounting system can be better described by GAS (Hamidi, 2019). GAS advised adding the environmental cost of the business operation to the operational cost to define an honest mechanism to report firms' profit (Tu & Huang, 2015). Business activities in production and operations would result in harmful waste, which is an environmental challenge to the economy to maintain the tag of the green economy. However, recognizing income and expenses related to the environment are associated with some hidden costs, which is a challenge for firms to calculate (Farouk et al., 2012). Nevertheless, firms are supposed to disclose any environmental costs embedded in business activities, which would have a deep impact on the environment. Thus, all stakeholders put pressure on firms with strong financial conditions to perform their social and environmental responsibilities comprehensively. Thus, the demand for disclosure is positively linked with the profit of firms (Rajak, 2022). Moreover, it would enhance the competitive advantage of the firms and improve the relationship between firms and their external stakeholders, which improve the economic performance of the firms by raising profit levels (Budiono & Dura, 2021).

Adopting GAS by a firm demonstrated a good environmental performance of the firm and improved its financial performance. Thus, GAS helped in improving environmental performance and management of overall business. Moreover, including environmental costs in financial reporting increased the accuracy of total production cost calculations. It would also help identify the area to reduce environmental costs and increase firms' economic performance (Endiana et al., 2020). GAS reported information related to the environment to inform the external parties and stakeholders about the environmental performances of firms. Thus, GAS includes environmental accounting, which includes identifying, measuring, and allocating environmental costs. Moreover, integrating these costs into business operations to identify the environmental obligations and to communicate this information to all stakeholders via financial reporting (Riyadh et al., 2020). However, the authors reported a negative relationship between environmental costs and GAS. In another empirical work, Bassey et al. (2013) found that environmental costs reported in financial accounts enhanced the firms' performance.

Laskar et al. (2018) reported that reporting environmental costs and social aspects in GAS enhanced the goodwill of firms in the eyes of all stakeholders and increased the confidence of the investors. Particularly, providing environmental cost information to investors remained effective for investment growth. Rahman & Islam (2023) analyzed firms in Bangladesh and discovered positive correlations between GAS and environmental performance. Moreover, providing information about GAS enhanced the goodwill of the firms in society by demonstrating its commitment. GAS also raised investor's confidence in firms' performance (Laskar & Maji, 2018). Felmania et al. (2014) termed this GAS as Corporate Social Responsibility (CSR), which would help achieve social equality and report environmental costs from business operations. Thus, implementing CSR in GAS increased the confidence of all stakeholders of the firms and improved trust in firms' business activities (Machmuddah et al., 2020). Chen et al. (2018) mentioned that sustainable development in the business's economic and environmental activities is associated with CSR activities in developing economies. Chen & Lee (2017) investigated and confirmed that adapting and enhancing CSR practices increased the overall value of the firms.

Olayinka & Oluwamayoma (2014) investigated the environmental aspects of CSR and found that it was helpful in raising firms' value. Similarly, Lusiana et al. (2021) showed that CSR raised firm value. Thus, a higher level of CSR can achieve a higher firm value. Moreover, environmental and social responsibility initiatives of the firms enhanced the reputation of the firms. This reputation could be helpful in achieving consumer confidence in the firms' operation performance. It shows that firms are not only targeting their profits but also have strong concerns about environmental and social costs in financial reporting, which reflects the CSR aspects of firms. Astuti et al. (2022b) found that adopting GAS increased the profitability of the firms. Particularly, disclosing environmental accounting information was found helpful in winning the confidence of shareholders and investors, which increased investment level in the firms and increased the value of the firm through rising firms' profits. Dura and Suharsono (2022) examined Indonesian manufacturing firms and found that GAS helped to improve the environmental performance of the firms. Similarly, Putri et al. (2019) investigated and found that GAS also helped to raise firms' profits and stock prices, which attracted investors to invest more in such firms' stocks. Some other studies also reported that GAS helped to raise firms' profits and stock prices. Thus, the disclosure of green accounting helped to raise firms' value (Al-Dhaimesh, 2020).

Some literature on the topic worked on Management Accounting Systems (MAS) to consider the environmental cost in financial reporting. For instance, Ojra et al. (2021) explored the literature on MAS and its effect on organizations to adapt the environmental standards. The author reported that Strategic Management Accounting (SMA) is also a promising framework in this regard, which is realizing insights into market dynamics, competitors, and customer preferences. The authors argued that many businesses have highlighted the need for robust planning, control, and strategic decision-making processes to ensure success in the market. They suggested that a caring environment, customer, and competitor would help companies to stay competitive in the market. Thus, adapting GAS would be helpful in achieving firms' goals. In response to environmental challenges, firms should focus on their MAS to better fit modern manufacturing situations (Hope & Wang, 2018) and avoid any environmental damage.

Visedsun and Terdpaopong (2021) argued that traditional accounting practices might not be enough to handle the challenges posed by modern manufacturing environments, which indicated a need for more adaptive and strategic approaches to

accounting systems. Particularly, GAS would help in effective planning about environmental problems. Rashid et al. (2023) suggested that senior executives should collect data for effective planning in rapidly changing business environments to propose efficient accounting standards for firms. In the same way, Cuganesan et al. (2012) also suggested working on collecting effective data on environmental and non-financial matters for effective planning. Thus, it would be helpful for business decisions. Particularly, adopting GAS would play an effective role in analyzing and consolidating data to meet organizational needs, which could be helpful in improving decision-making and firms' efficiency concerning environmental problems. Moreover, it would also be effective in aligning the information among various organizational functions and goals (Bui et al., 2023; Cescon et al., 2019). Thus, environmental issues should not be ignored while aligning the firms' objectives with the interests of internal and external stakeholders.

Thus, SMA and GAS would help in aligning accounting practices with organizational strategies (Cescon et al., 2019). Consequently, these accounting practices can increase organizational competitiveness by increasing the trust in the firms' accounting systems. Thus, accounting practices helped in achieving firms' long-term goal of gaining a competitive edge (Oyewo, 2021), which are comprised of various categories of techniques (Oyewo, 2021). Suttipun and Saelee (2015) mentioned that conditions for shifting the accounting system were always changing and it would be hard to gauge the accurate performance of the firms by adopting any accounting standards. However, among others, GAS is more popular in improving firms' performance in facing social and environmental challenges. Thus, the large firms quickly switched to the GAS (Hubbard, 2009). Additionally, firms should respect the interests of different stakeholders while making any decisions (Suttipun et al., 2021). This broader objective of firms' performance expanded the orthodox views of traditional accounting systems and proposed to include environmental and social aspects in the accounting system (Koapaha, 2024), which are major ingredients of GAS.

Theoretically, the triple bottom line framework has been widely utilized in manufacturing businesses to care for the concerns of stakeholders about environmental management issues. Thus, in a more holistic view, firms need GAS aspects collectively to achieve their long-term goals of sustainable performance (Braccini & Margherita, 2018), which realizes the need for environmental performance by emphasizing conservation and sustainable resource utilization. In addition, we cannot ignore the economic indicators of firms' performance related to financial aspects (Braccini & Margherita, 2018). The key indicators of economic performance are profit growth, cost reduction, and increasing market share, which truly represent the economic value proposition of the firms (Elhuni & Ahmad, 2017). The literature has identified that the nature of sustainable performance is diverse and complex (Zhu et al., 2019), which needs to understand different circumstances in decision-making (Fauzi et al., 2010). However, Koapaha (2024) argued that the common goal of sustainable performance could be achieved by focusing on environmental performance indicators. Additionally, the literature has also highlighted the need for social performance, which can be achieved by enhancing employees' well-being (Foo et al., 2018).

The reviewed literature signified the importance of GAS on firms' social and environmental indicators. However, this investigation is rare in Saudi literature and missed in the case of Alkharj. Thus, this study is an effort to contribute to this literature gap by exploring the effect of GAS on the environmental performance of the firms in Alkharj. Moreover, the mediating role of social performance in the relationship between GAS and environmental sustainability has also been investigated.

3. Hypotheses and Methods

3.1 Hypotheses

The literature has signified that GAS is helpful in raising environmental sustainability. Environmental sustainability includes the indicators related to the conservation of natural resources, waste reduction, and energy efficiency. Thus, following these indicators, a firm shows a commitment to environmental sustainability (Braccini & Margherita, 2018). Liu (2020) also presented a comprehensive model, which exposed a positive correlation between environmental sustainability and GAS. GAS also recommends adopting social performance indicators, which include employee well-being, safety, and satisfaction, which may realize the concept of human capital in a firm (Foo et al., 2018; Hourneaux et al., 2018). In turn, social indicators may positively influence environmental performance, which shows the significance of employees in achieving environmental sustainability (Alt et al., 2015; Ratmono, 2024). Based on these theoretical linkages, the hypotheses of the study are as follows:

H_1: *GAS improves the environmental sustainability*.

H_2: *GAS enhances the social performance*.

H_3: *Social performance mediates the association between GAS and environmental sustainability.*

3.2 Questionnaire and methods:

A well-structured questionnaire is developed including 3 constructs of green accounting (GA), social performance (SOC), and environmental sustainability (ENV). GA carries 13 items including all important aspects of green accounting. SOC carries 4 items including all important aspects of social performance as per GAS social recommendations. ENV carries 8 items

including all important aspects of environmental sustainability as per GAS environmental recommendations. The questionnaire was distributed to 300 accounting practitioners in the firms located in Alkharj governorate and some accounting teachers at the university level. 224 valid responses are collected. Thus, the response rate is about 75%. All questions carry the 5 options of the Likert Scale. Thus, a higher value represents a higher degree of agreement with all mentioned items in the questionnaire. Partial Least Square-Structural Equation Modelling (PLS-SEM) is applied to test the hypotheses in the following way:

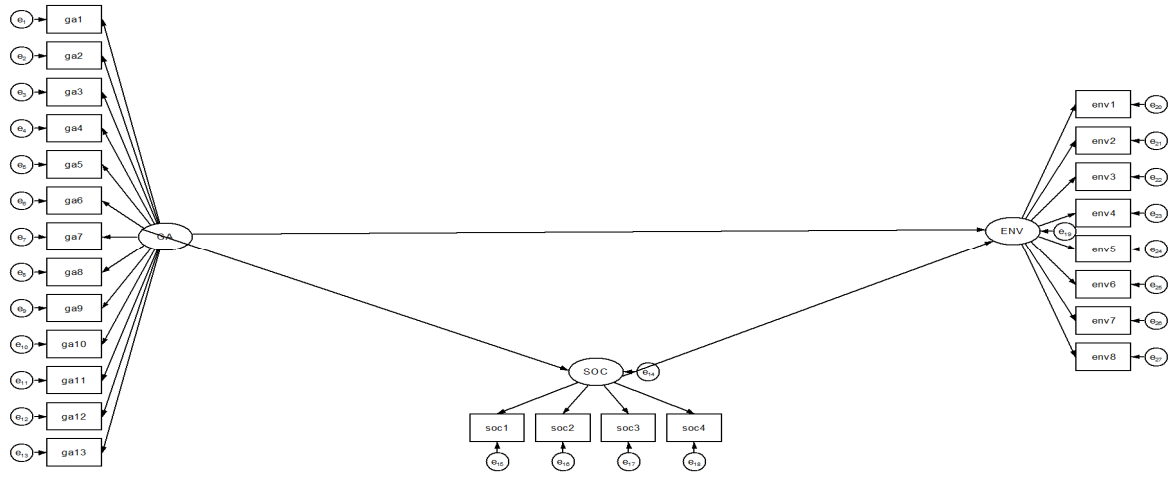

Fig. 1. SEM diagram showing hypotheses

Fig. 1 shows that the direct effect of GA on ENV is hypothesized. Then, the effect of GA on SOC is hypothesized, and the effect of SOC is hypothesized on ENV. Thus, social performance (SOC) is utilized here to check the mediation between GA and ENV. After factor loading, the reliability of the latent construct is verified using CR, AVE, and Cronbach's Alpha (CA). Generally, the reliability of the latent construct may be acceptable if the estimated values of CR and CA are more than 0.7 and the value of AVE is more than 0.5. Afterward, the SEM model is regressed, and the overall fitness of the model is verified through Chi-square (χ^2) to degrees of freedom (df) ratio (χ^2/df), CFI, TLI, RMSEA, and SRMS. Following Schermelleh-Engel et al. (2003), the model can be assumed a good fit, if χ^2 /df is between 0-3, CFI and TLI are between 0.95-0.97, RMSEA is between 0.05-0.08, and SRMR is between 0.05-0.1. Afterward, the hypotheses can be tested by the estimated SEM.

4. Results

In Table 1, the survey revealed that 64% of respondents are male and 36% are female. This distribution shows the participation of both males and females in the survey. In terms of age, the data shows different age groups. For instance, 16% of respondents are aged between 30-39, 30% are between 40-49, 47% are between 50-59, and 7% are above 60 years of their age. This breakdown highlights the age diversity among the respondents. Likewise, the data shows the experience and 11% of respondents have 0-4 years of experience, 26% between 5-9 years, 40% between 10-14 years, and 23% have 15 years and above. In terms of educational qualifications, 44%, 32%, and 24% of respondents have an undergraduate qualification, a graduate degree, and a PhD or equivalent qualification, respectively. Lastly, 54% of respondents work in the government sector, and 46% work in the private sector.

Table 1
Respondents' profile

Variable				
Gender	**Male**	**Female**		
	64%	36%		
Age	**30-39**	**40-49**	**50-59**	**60 and above**
	16%	30%	47%	7%
Experience	**0-4**	**5-9**	**10-14**	**15 and above**
	11%	26%	40%	23%
Qualification	**Undergraduate**	**Graduate**	**PhD**	
	44%	32%	24%	
Sector	**Government sector**	**Private sector**		
	54%	46%		

Afterward, items are loaded into three defined constructs, and the reliability and internal consistency of the measurement of the constructs are accessed through CR, AVE, and CA tests in Table 2. CR test shows that the CR value of GA is 0.896, the

CR of SOC is 0.752, and the CR of ENV is 0.765. Thus, the observed items represent the validity of the underlying constructs with CR values more than 0.7. Similarly, the AVE value of GA is 0.816, the AVE of SOC is 0.764, and the AVE of ENV is 0.789. All AVE values are more than 0.7 and reflect the 81.6%, 76.4%, and 78.9% of the variance in the constructs GA, SOC, and ENV are captured by their respective defined items. Lastly, the CA value of GA is 0.906, the CA of SOC is 0.865, and the CA of ENV is 0.806. All CA values are more than 0.7 and reflect the high internal consistency of all constructs.

Table 2
Construct reliability

	CR	AVE	Cronbach's Alpha
GA	0.896	0.816	0.906
SOC	0.752	0.764	0.865
ENV	0.765	0.789	0.806

Table 3 shows the overall model fit statistics of the hypothesized model. The estimated value of χ^2/df is 2.036, which shows a good fit model. The estimated value of CFI is 0.955, which indicates a better-fit model. The estimated value of TLI is 0.965, which reflects a good fit model. The estimated value of RMSEA is 0.056 and the estimated value of SRMR is 0.078, which are within the acceptable bounds and indicate a good fit model. In summary, the overall model fitness is acceptable for the hypothesized model as per the criteria proposed by Schermelleh-Engel et al. (2003).

Table 3
Overall model fit

Test	Acceptable Range	Estimated Value
χ2 /df	0-3	2.036
CFI	0.95-0.97	0.945
TLI	0.95-0.97	0.965
RMSEA	0.05-0.08	0.056
SRMR	0.05-0.1	0.078

Table 4 and Fig. 2 present the results of the tested hypotheses. GA has a positive and significant effect on ENV. Thus, hypothesis (H1) is found valid with this result and green accounting is directly helping to raise environmental sustainability. In the same way, GA has a positive and significant effect on SOC. Thus, green accounting is found helpful in raising the social performance of the firms. Thus, hypothesis (H2) is found valid with this result. Lastly, SOC has a positive and significant effect on ENV. Thus, social performance is found helpful in raising the environmental sustainability of the firms and validates the hypothesis (H3). Thus, social performance is found to mediate the relationship between GA and environmental sustainability.

Table 4
Results of tested hypotheses

Hypothesized Relationship	Coefficient	Standard error	z-value	p-value
ENV←GA	0.553	0.280	1.98	0.048
SOC←GA	0.956	0.521	1.83	0.067
ENV←SOC	0.179	0.047	3.84	0.000

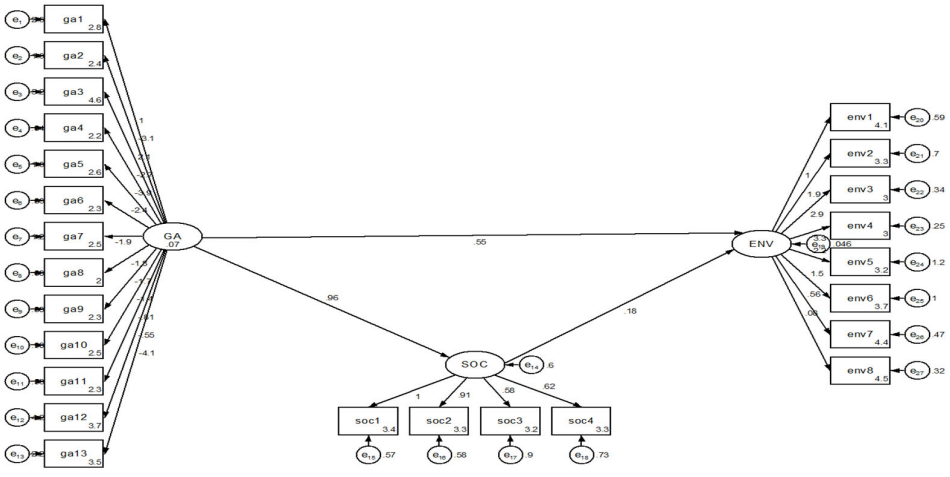

Fig. 2. Result of SEM

5. Discussions

The results show that green accounting is found helpful in raising the environmental performance of the firms located in the Alkharj governorate, which is consistent with Rahman & Islam (2023) in Bangladesh and Dura & Suharsono (2022) in Indonesia. However, it opposes the results of Riyadh et al. (2020). GAS is a system caring for environmental costs and benefits in financial reports. Green accounting goes beyond traditional accounting methods, which only focus on financial indicators. Traditional accounting ignores the environmental impact of business activities. However, green accounting contributes to improving environmental sustainability by internalizing environmental costs in financial reports. Thus, by incorporating environmental costs into accounting systems, green accounting ensures that firms are aware of their true costs including environmental cost, which would encourage and help in doing more sustainable decision-making. Thus, GA ensures resource efficiency by highlighting natural resource consumption and depicting the generation of waste and emissions out of business activities. Thus, by counting resource use and waste generation, firms would identify the opportunities to reduce their environmental footprint. For instance, firms can employ energy-saving measures, which could reduce the operational cost of the businesses on the one hand and greenhouse gas emissions on the second. Thus, it measures environmental performance and cares about the issues related to environmental costs. For instance, carbon emissions, water usage, and biodiversity impact of firms' activities can be monitored to ensure environmental sustainability. Moreover, environmental risks like regulatory changes, resource scarcity, and climate change can also be identified and cared for, which would have significant implications for firms and could help in their strategies to mitigate environmental problems. For instance, in the case of water usage, firms need to find water-saving technologies. Green accounting helps to ensure transparency and accountability in the environmental problems to all firms' stakeholders and green accounting practices improve the confidence of all stakeholders. On the whole, green accounting is a reliable tool for improving environmental sustainability considering environmental issues in decision-making processes, which helps to promote resource efficiency.

GAS also helps to improve the social performance in the results of the study. Green accounting is equally helpful in incorporating the social costs of business activities. Social costs may include costs associated with human health, labor conditions, and community well-being from business activities. Considering the social aspect of green accounting can help firms recognize the social problems associated with business operations, which reduces the social cost and improves the business image in the eyes of all stakeholders. For instance, businesses might care about the issues related to workplace safety, health benefits, training programs, and work-life balance initiatives, which can improve the well-being of their employees and raise business performance in response. On the community side, firms might spend on charitable contributions and community development initiatives. The results also corroborate the mediating role of social performance between GA and ENV. Thus, it would help to engage all business stakeholders, which would help in implementing environmentally friendly initiatives. For instance, firms care about the social responsibility of their employees. In turn, employees would help the firms in achieving environmental sustainability targets. The social responsibility regarding community well-being would help the firms for their smooth operation with fewer disputes within the community. On the whole, the social performance of the firms can help in achieving the objectives of green accounting and environmental sustainability, which help in engaging all stakeholders of the firms and fostering the reputation and trust of the employees, customers, and community. This interconnectedness between social and environmental factors might help in achieving the long-run goals of the firms.

6. Conclusion

Green accounting may have many pleasant effects in achieving environmental performance. The present study examines the effect of GAS on environmental sustainability and social performance in the firms located in the Alkharj governorate by using the SEM technique. Additionally, the mediating role of social performance is also examined between GAS and environmental sustainability. Data from 224 despondences are collected through a well-structured questionnaire carrying items related to three constructs, i.e., green accounting, social performance, and environmental sustainability. The results of SEM show that GAS helps to improve environmental sustainability directly. Secondly, GAS also helps to raise the social performance of the firms, which helps to improve environmental sustainability in turn. Thus, social performance acts as a mediator. Consequently, green accounting reflects the true impact of business activities by incorporating environmental costs and benefits in the accounting system. These environmental costs and benefits would help in making optimal business decisions to protect the business from any regulatory action by the government. Moreover, GAS improves resource efficiency by optimal use of resources and by controlling waste generation, which would help in reducing environmental footprints by realizing the areas of improvement related to environmental problems. Moreover, GAS engages all business stakeholders in favor of business to achieve social and environmental targets. For instance, GAS helps to increase employee well-being, and also improves relationships with the community. Thus, it helps to win the trust of these stakeholders. Moreover, it improves the business reputation as well. In turn, the community and employees will be helpful in achieving environmentally sustainable targets of the firms. Thus, the social performance of the business would mediate the association between GAS and environmental sustainability.

The study recommends the firms located in Alkharj consider and report the cost related to pollution control, waste management, and environmental remediation. Moreover, resources should be used optimally to have their lowest environmental effects. Moreover, firms should report pollution emissions produced by all business activities including production, transportation, and other supply chain activities. Additionally, firms should report their environmental

performance and sustainability initiatives such as firms' pollution prevention and waste reduction policies. Firms should also disclose their environmental compliance policies as per laws, regulations, and standards of the Alkharj governorate. Alkharj is heavily dependent on fossil fuel consumption and firms should invest in renewable energy. Last but not least, the firms should involve all stakeholders to improve the environmental performance of their business.

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