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# Knowledge management as a mediator of the impact of corporate social responsibility on sustainable development: Empirical evidence from a low-income country

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## Abstract

In developing countries, organizations face increasing pressure to incorporate Corporate Social Responsibility (CSR) into their strategic operations to promote Sustainable Development (SD). This study explores the role of Knowledge Management (KM) as a mediator between CSR and SD within Hayel Saeed Ana'am Group (HAS) in Yemen. It focuses on understanding how CSR activities influence KM practices and, consequently, how these practices facilitate the achievement of sustainability objectives. A quantitative research design with an explanatory focus was employed, utilizing a cross-sectional survey. Data were collected from 191 employees of HAS using a structured questionnaire. The collected data were analyzed through SPSS and SmartPLS to examine the relationships among CSR, KM, and SD and to evaluate the mediating effect of KM. The analysis reveals that CSR has a positive effect on both KM practices and SD outcomes. Moreover, KM plays a crucial mediating role, enhancing the impact of CSR initiatives on sustainable development. Within CSR dimensions, ethical responsibility emerged as the most influential, while environmental concerns were the most significant component of SD. Strong associations were found among all variables, supporting the validity of the proposed model. The findings suggest that integrating CSR into organizational strategies can effectively strengthen knowledge management processes, which in turn contribute to sustainable development. This study provides valuable empirical evidence from a low-Income country context, highlighting how robust KM practices can magnify the positive outcomes of CSR initiatives and support long-term sustainability.

**Keywords:** Corporate social responsibility, Knowledge management, Sustainable development, Yemen.

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## 1. Introduction

Corporate social responsibility (CSR) is a concept that has garnered growing attention in academic and professional literature, as it represents a framework that redefines the relationship between an organization and its social environment toward positive and sustainable engagement. CSR focuses on multiple types of stakeholders, both internal and external to the organization. Therefore, CSR expands the concept of work beyond the traditional framework of jobs, becoming an important means for individuals to discover the true meaning of their professional roles within a framework that goes beyond mere material or profit-driven objectives [1]. In a contemporary business sense, CSR reflects an organization's commitment to operate sustainably [2]. CSR is emerging as a critical factor in fostering innovative employee behavior, contributing to cleaner production processes, and achieving corporate sustainability goals [3]. CSR has also demonstrated a positive influence on companies' economic growth, including profitability and company value [4].

It is increasingly important for organizations to actively participate in CSR initiatives given their wide-ranging benefits for enhancing a company's reputation, stakeholder relationships, regulatory compliance, and long-term sustainability [2]. CSR is a multifaceted concept that reflects an organization's commitment to society and the environment; These commitments encompass several dimensions, including environmental, ethical, philanthropic, and economic responsibilities. In practice, a thorough understanding of these dimensions provides a foundational basis for exploring their influence on corporate performance and relationships with stakeholders, as well as promoting sustainable development (SD) [5]. Specifically, CSR involves environmental responsibility, which promotes sustainable practices; ethical responsibility, related to fairness and transparency; philanthropic responsibility, focusing on community engagement and support; and economic responsibility, which integrates these commitments with the organization's financial goals [2]. Over time, CSR has evolved from a mere voluntary charitable activity to a strategic component rooted in contemporary legal and regulatory frameworks. Legal compliance has become a key component that directly impacts an organization's performance and stakeholder confidence. Recent research highlights that the legal dimension of CSR implementation effectively contributes to enhancing the efficiency of internal operations, raising employee engagement. Research into CSR can help address some of the major challenges facing society, and gaining public acceptance, making legal compliance a strategic tool for reputation management, and enhancing community engagement [6]. Furthermore, CSR research plays an important role in addressing pressing societal challenges, including SD [7]. CSR and social and economic sustainability are now viewed as key factors in enhancing institutional trust and commitment. They have attracted the attention of researchers and policymakers, as they have shown that all responsibilities, such as economic, legal, ethical, and philanthropic responsibility, as well as economic and social sustainability, have had a positive impact on institutional trust [8]. Companies can run responsible CSR programs, provide positive impacts on society and the environment, and support the SD Goals [9].

There are many perspectives on the concept of Sustainable development (SD), but they converge on the fundamental aspects through which it is addressed, which are the so-called pillars of development, represented by the economic, social, and environmental aspects [10]. SD is a popular concept adopted by many governments, organizations, and companies to express the principles underlying their policies and initiatives. This concept reflects the drive to reduce the environmental impact of various projects and activities, while striving to achieve development goals and meet the needs of communities [11].

This study seeks to address this gap within the compelling context of Yemen, a nation facing profound developmental challenges. Focusing on the Hayel Saeed Ana'am Group (HSA), this research examines the mediating role of KM in the link between CSR and SD. The choice of HSA is deliberate and critical. As one of Yemen's largest and most widespread conglomerates, with a significant operational footprint extending across numerous Arab and other countries, HSA's scale and influence amplify its social responsibility. Its extensive operations place it in a unique position where its CSR strategies can have a substantial impact on national sustainable development efforts. The challenging Yemeni context makes the examination of how HSA leverages internal knowledge to convert its social responsibilities into sustainable outcomes not just an academic inquiry, but a crucial case study in corporate stewardship during adversity.

## 2. Literature Review

### *2.1. Knowledge Management (KM*

Knowledge management (KM) is a modern concept in management science, and interest in it has increased over the past two decades. This has led to the emergence of numerous definitions of the concept, which vary depending on the specializations and perspectives of researchers. The definitions of KM are numerous, due to the diversity of thinkers, their areas of interest, and their areas of specialization. Some view KM as a business strategy, others as intellectual capital, and a third view the term as a fundamental component of an organization, viewing it as organizational knowledge used to change and regulate the behavior of individual employees and the organization's processes and activities. Knowledge sharing is one of the most important factors contributing to achieving SD [12] . And defined as "the process of gathering information, making decisions, and taking action in response to the external environment. It includes measures such as flexible management to adapt to changing situations, as well as integrative strategies adopted by organizations to implement self-improvement" aspects [10]. The KM also refers to a set of administrative tasks and activities carried out by individuals, relying on their experience and abilities to deal with exceptional situations faced by the organization as part of its interaction with the surrounding and general environment. This goal is not only to achieve its objectives with high efficiency, but also to ensure the effective continuity of the operations and activities of business organizations and companies [13]. In another definition, the focus is on KM through administrative organizational processes, where KM is as "the processes of planning, organizing, controlling, coordinating, and synthesizing knowledge and all activities related to

intellectual capital through personal processes and capabilities and organizational potential, and using it to achieve a positive impact on the competitive advantage that the organization aspires to achieve, in addition to benefiting from its continued sustainability, dissemination, and use by knowledge individuals, computer systems, and networks" [14].

KM (KM) in any organization aims to maximize its value by helping its human resources innovate and adapt to changes, and in addition, many factors drive organizations to adopt KM practices to manage their capabilities more systematically, and this is because, in today's global market economy, survival is for the smartest, as developments change rapidly, requiring faster and sharper adaptability to survive, and this requires the organization to operate as a single, harmonious body of knowledge, capable of focusing on critical issues, perceiving and learning quickly, and making decisions and acting wisely without hesitation [15].

*2.2. Corporate Social Responsibility*

Environmental responsibility refers to companies' commitment to operating in ways that preserve the environment and reduce the negative impact of industrial activities on nature. Common measures in this area include reducing pollution, lowering greenhouse gas emissions, limiting the use of single-use plastics, rationalizing water consumption, and reducing waste. It also includes adopting renewable energy sources and using sustainable resources, in addition to initiatives such as tree planting and supporting environmental research. Ethical responsibility refers to ensuring that an organization operates with integrity and fairness toward all stakeholders, including leaders, investors, employees, suppliers, and customers. Ethical practices include paying fair wages that exceed the legal minimum, ensuring the use of free trade principles in the supply chain, and preventing the exploitation of forced or child labor. Philanthropic responsibility focuses on an organization's active participation in improving society and the world around it, whether through direct donations to charitable and non-profit organizations or establishing charitable funds to support various causes, while ensuring that these activities are consistent with environmental and ethical values. The economic responsibility dimension is concerned with making financial decisions for the organization while taking into account the social and environmental dimensions, so that the ultimate goal is to achieve a sustainable positive impact rather than only seeking to maximize profits [5].

*2.3. SD and KM*

SD has become viewed as one of the main ideologies in the development of society, as it requires the concerted efforts and coordination of social, economic, and environmental initiatives within organizations; the identification of many influencing factors; and the establishment of a supportive administrative system Atkociuniene and Mikalauskiene [12]. Pais, et al. [16] conducted a systematic literature review on the relationship between KM and SDGs, concluding that there was limited research on this relationship. However, researchers agreed on the necessity of KM in achieving the SD plan and the importance of investing in it, especially in developing countries. While, Ayobami, et al. [17] also emphasized the importance of KM in achieving the SDGs, noting that the successful implementation of these SDGs requires global partnerships and enhanced cooperation and knowledge exchange among different countries. This can be achieved by bridging the digital divide between developed and developing countries by supporting and sharing knowledge. Al Yami and Ajmal [18] conducted a study to understand the impact of KM processes on operational efficiency and SD in several government institutions in the UA; That study used a three-section questionnaire, first section was devoted to measuring KM, which included six dimensions: knowledge acquisition, knowledge production, knowledge collection, knowledge storage and retrieval, knowledge sharing, and knowledge use. The third section was devoted to measuring SD, the results showed that KM practices had a positive impact on both operational efficiency and SD, furthermore, operational efficiency, as a mediating variable, played an important role in strengthening the relationship between KM and SD, achieving the three pillars of SD also requires integrating sustainability principles into operational processes by enhancing KM practices and leveraging diverse knowledge resources. A study by Widyanti, et al. [19] on two of the largest mining companies in Indonesia revealed that four out of five KM dimensions—knowledge acquisition, knowledge storage, knowledge application, and knowledge creation—had a direct impact on corporate sustainability. From the environmental dimension of development, the results of a recent study by Weina and Yanling [20] indicate that KM practices have a positive impact on environmental sustainability, environmental awareness, and the use of green technology.

*2.4. KM and CSR*

Recent literature indicates a complex interaction between the dimensions of CSR (economic, environmental, and social) and KM. The results show that environmental and social CSR are closely related to the knowledge exploration strategy (KM), while economic CSR is significantly related to the knowledge exploitation strategy (KM). The study also demonstrated that economic responsibility indirectly contributes to the development of innovative capabilities through knowledge exploitation, while no similar significant effect was found for environmental and SCR through knowledge exploration [21].

The legal dimension is pivotal in understanding and implementing CSR. It is no longer viewed solely as a voluntary activity, but rather as an organizational and strategic component linked to national and international legal frameworks and legislation. Literature indicates that adherence to legal standards in implementing CSR contributes to improving internal operational efficiency, enhancing employee loyalty, and increasing the level of acceptance and trust from society. Legal compliance is also an effective tool in managing corporate reputation and balancing stakeholder requirements with organizational practices. However, the effectiveness of this dimension still faces challenges, including disparate legislation, weak institutional coordination, and limited legal awareness within some organizations. Public policy tools

such as mandatory reporting, financial incentives, and the adoption of international standards (such as the GRI) have proven effective in enhancing compliance and achieving a positive impact [6].

*2.5. CSR and SD*

A In light of the rapid global transformations in the areas of SD and CSR, integrating CSR has become an indispensable strategic component of the contemporary corporate structure. CSR has transcended the traditional framework of charitable work to become an effective tool that integrates the objectives of economic growth with the principles of sustainability and social welfare. A recent study indicates that CSR has become an essential part of the corporate value of leading organizations, representing a crucial factor in guiding strategies and enhancing the social and environmental efficiency of corporate activities Ashurov, et al. [22].

Tian, et al. [23] found positive associations between corporate social responsibility and sustainable development, with the results confirming the effectiveness of each dimension of social responsibility in supporting sustainable development goals. Recent models, such as the "CSR towards the SDGs" index, confirm that implementing clean energy projects is a top priority for CSR in emerging economies, given its direct impact on mitigating global warming and enhancing the efficiency of long-term investments. Furthermore, the success of CSR in achieving sustainability requires advanced technical infrastructure and a qualified workforce to ensure effective implementation [24].

*2.6. Hypotheses*

*$H_1$: CSR has a significant positive impact on SD*
*$H_2$: CSR has a significant positive impact on KM.*
*$H_3$: KM has a significant positive impact on SD.*
*$H_4$: KM mediates the relationship between CSR and SD.*

*2.7. Conceptual Model*

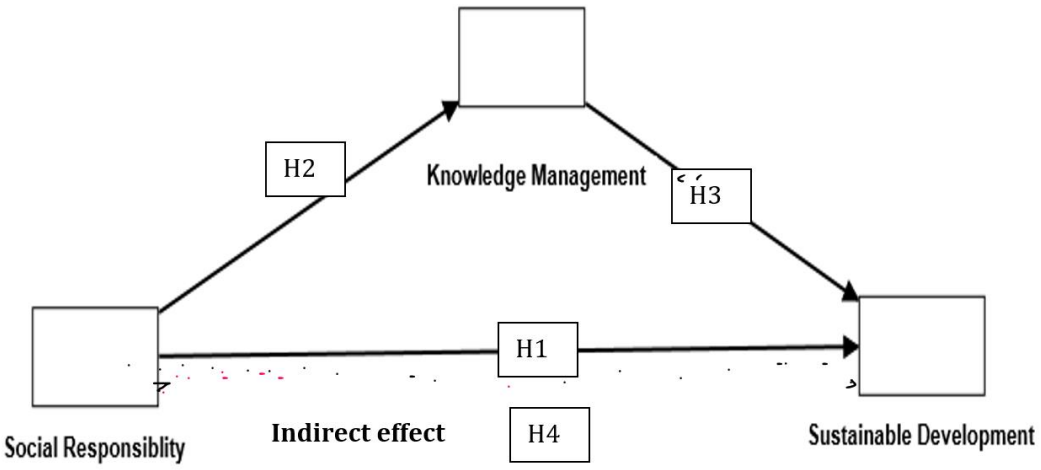


**Figure 1.**
Study conceptual model.

## 3. Materials and Methods

This study employs a quantitative research approach with an explanatory and correlational design to investigate the mediating role of Knowledge Management (KM) in the relationship between Corporate Social Responsibility (CSR) and Sustainable Development (SD) within organizational settings. The research utilizes a structured questionnaire as the primary data collection instrument, developed based on established theoretical frameworks in the field.

*3.1. Study Population and Sample*

The study population consisted of professionals actively engaged in CSR initiatives and knowledge management processes at Hayel Saeed Ana'am Group (HAS) in Yemen. Using purposive sampling techniques, we identified and selected 191 employees who demonstrated substantial involvement in these organizational practices. This sampling approach ensured that participants possessed relevant experience and insights regarding the research constructs, thereby enhancing the quality and validity of the collected data.

*3.2. Measurement and Data Analysis Methods*

The measurement framework incorporated three main constructs:

- CSR was operationalized through four dimensions: economic responsibility, human responsibility, ethical practices, and legal compliance
- KM was measured across five capability areas: knowledge acquisition, generation, storage, application, and sharing/distribution
- SD was assessed through four dimensions: economic, social, environmental, and technological development

Data analysis was conducted using SPSS v28 and SmartPLS v4.0.9.5. Descriptive statistics, including means, standard deviations, frequencies, and percentages, were used to summarize participants' profiles and key variables. To test the hypotheses, Hayes [25] PROCESS macro was applied, enabling assessment of direct, indirect, and mediating effects of KM on the CSR–SD relationship. Additionally, Harman's single-factor test was performed to detect potential common method bias. Reliability for all dimensions of CSR, KM, and SD was confirmed with Cronbach's Alpha scores.

### *3.3. Measurement Scales*

All constructs were measured using a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). This scaling method allowed for consistent measurement of participants' perceptions and attitudes regarding the various dimensions of CSR, KM, and SD practices within HSA.

### *3.4. Reliability and Validity*

The research instrument demonstrated strong psychometric properties, as evidenced by Cronbach's alpha values exceeding the recommended threshold of 0.70 for all constructs. Specifically, reliability coefficients ranged from 0.774 to 0.916 across all dimensions, indicating excellent internal consistency. Content validity was established through comprehensive literature review and expert validation, while construct validity was confirmed through confirmatory factor analysis during the measurement model assessment.

**Table 1**.
Scale Reliability and internal consistency.

| | | **Cronbach's Alpha** |
|---|---|---|
| CSR | Economic Responsibility | 0.804 |
| | Human Responsibility | 0.863 |
| | Ethical Dimension | 883 |
| | Legal Dimension | 0.774 |
| SD | Economic Dimension | 0.905 |
| | Social Dimension | 0.914 |
| | Environmental Dimension | 0.912 |
| | Technological Dimension | 0.888 |
| KM | Knowledge Acquisition | 0.875 |
| | Knowledge Generation | 0.902 |
| | Knowledge Storage | 0.882 |
| | Knowledge Application | 0.916 |
| | Knowledge Sharing and Distribution | 0.881 |

As presented in Table 1, the reliability of the study scale, as assessed by Cronbach's Alpha, demonstrates strong internal consistency across all dimensions, with values exceeding the acceptable threshold of 0.70. These results confirm the scale's consistency and dependability for evaluating the constructs under study.

## 4. Results and Discussion

### *4.1. Sample Characteristics*

**Table 2.**
Sample Characteristics.

| | | **N** | **%** |
|---|---|---|---|
| Gender | Female | 26 | 13.6% |
| | Male | 165 | 86.4% |
| Education | Less than high school | 1 | 0.5% |
| | Bachelor's | 155 | 81.2% |
| | High school | 11 | 5.8% |
| | Postgraduate | 24 | 12.6% |
| Age | Less than 30 years | 15 | 7.9% |
| | More than 40 years | 71 | 37.2% |
| | From 30 to 35 years | 59 | 30.9% |
| | From 36 to 40 years | 46 | 24.1% |
| Tenure | 20 years or more | 41 | 21.5% |
| | Less than five years | 35 | 18.3% |
| | From 11 to 15 years | 40 | 20.9% |
| | From 15 to 20 years | 34 | 17.8% |
| | From 5 to 10 years | 41 | 21.5% |

*4.2. Statistical Analysis*

*4.2.1. Descriptive statistics of CSR*

**Table 3.**
CSR descriptive statistics.

| | Mean | SD |
|---|---|---|
| Economic Responsibility | 5.5194 | 0.96616 |
| Human Responsibility | 5.5372 | 1.00327 |
| Ethical Dimension | 5.7225 | 0.99275 |
| Legal Dimension | 5.1780 | 1.03035 |
| CSR | 5.4893 | 0.89671 |

As presented in Table 3, the analysis of CSR dimensions shows that the Ethical Dimension had the highest mean score (5.7225 ± 0.99275), indicating a strong emphasis on ethical practices. This was followed by Human Responsibility (5.5372 ± 1.00327) and Economic Responsibility (5.5194 ± 0.96616), which also scored relatively high. The overall CSR dimension had a mean of 5.4893 ± 0.89671, reflecting consistent performance across related areas. The Legal Dimension scored the lowest with a mean of 5.1780 ± 1.03035, suggesting it might be a comparatively less prioritized area. These findings provide insights into the emphasis on various aspects of CSR within the study's context.

*4.2.2. Descriptive Statistics of Knowledge Management*

**Table 4.**
Knowledge Management descriptive statistics.

| | Mean | SD |
|---|---|---|
| Knowledge Acquisition | 5.2084 | 1.11937 |
| Knowledge Generation | 5.3037 | 1.15437 |
| Knowledge Storage | 5.3330 | 1.06628 |
| Knowledge Application | 5.2712 | 1.06897 |
| Knowledge Dissemination and Distribution | 5.3508 | 1.06676 |
| KM | 5.2934 | 1.01761 |

The analysis of KM dimensions in Table 4 reveals that Knowledge Dissemination and Distribution had the highest mean score (5.3508 ± 1.06676), followed closely by Knowledge Storage (5.3330 ± 1.06628) and Knowledge Generation (5.3037 ± 1.15437). The overall KM dimension recorded a mean of 5.2934 ± 1.01761, reflecting moderate to high effectiveness in managing knowledge. Knowledge Application scored slightly lower (5.2712 ± 1.06897), while Knowledge Acquisition had the lowest mean (5.2084 ± 1.11937), suggesting potential room for improvement in acquiring knowledge. These results underscore the balanced performance across KM processes, with a notable strength in dissemination and storage.

*4.2.3. Descriptive statistics of Sustainable Development*

**Table 5.**
Sustainable Development descriptive statistics.

| | Mean | SD |
|---|---|---|
| Economic Dimension | 5.4115 | 1.05435 |
| Social Dimension | 5.3110 | 1.09767 |
| Environmental Dimension | 5.5675 | 1.05431 |
| Technological Dimension | 5.3393 | 1.06627 |
| SD | 5.4073 | 0.97287 |

The analysis of SD dimensions shown in Table 5, indicates that the Environmental Dimension had the highest mean score (5.5675 ± 1.05431), highlighting a strong emphasis on environmental sustainability. This was followed by the Economic Dimension (5.4115 ± 1.05435) and the Technological Dimension (5.3393 ± 1.06627), suggesting moderate alignment with economic and technological aspects of sustainability. The Social Dimension scored the lowest among the dimensions (5.3110 ± 1.09767), indicating room for further enhancement in social sustainability efforts. The overall SD dimension recorded a mean of 5.4073 ± 0.97287, reflecting a balanced and consistent focus on sustainable practices across different domains.

### 4.3. Correlational Analysis

**Table 6.**
Correlational Analysis.

*Correlations*

| | SCR | KM | SD |
|---|---|---|---|
| CSR | 1.00 | | |
| KM | .870** | 1.00 | |
| SD | .823** | .831** | 1.00 |

**Note:** **. Correlation is significant at the 0.01 level (2-tailed).

As shown in Table 6, the correlational analysis shows strong and statistically significant positive relationships among Social Responsibility, KM, and SD. A robust correlation exists between CSR and KM ($r = .870$, $p < .001$), indicating that socially responsible practices strongly align with effective KM. Similarly, CSR is positively correlated with SD ($r = .823$, $p < .001$), highlighting its contribution to sustainability goals. Furthermore, KM and SD are also strongly correlated ($r = .831$, $p < .001$), underscoring the importance of KM in fostering sustainability. These findings emphasize the interconnectedness of these dimensions in achieving organizational excellence.

### 4.4. Model Quality

**Table 7.**
Model Quality indexes.

| | R-square | f2 |
|---|---|---|
| MV: KM | 0.757 | 0.202 |
| DV: SU | 0.731 | |
| IV: CSR | | 0.153 |

As shown in Table 7, the R-squared values demonstrate the significant explanatory power of CSR in the model. For KM, an R-square value of 0.757 indicates that 75.7% of the variance in KM is explained by Social Responsibility, highlighting its substantial influence on knowledge-related processes. Similarly, for SD, an R-squared value of 0.731 shows that 73.1% of the variance is accounted for by CSR and KM.

In addition, the effect size ($f^2$) values highlight the contribution of each independent variable to SD, with KM showing a moderate effect size of 0.202, emphasizing its significant role in influencing sustainability outcomes. Similarly, CSR also demonstrates a moderate effect size of 0.153, indicating its importance in driving SD, though its impact is slightly less pronounced than that of KM. These findings underscore the complementary roles of both factors in shaping sustainable practices.

### 4.5. Path Analysis

**Table 8.**
Path analysis.

| Hypotheses | | Path | B | SD | T | P |
|---|---|---|---|---|---|---|
| H1 | CSR -> SD | Pc | 0.892 | 0.054 | 16.61 | 0.000 |
| H2 | CSR -> KM | Pa | 0.987 | 0.046 | 21.46 | 0.000 |
| H3 | KM -> SD | Pb | 0.452 | 0.099 | 4.554 | 0.000 |

As presented in Table 8, the analysis reveals that CSR has a significant and positive impact on SD. The path coefficient ($B = 0.892$, $SD = 0.054$, $T = 16.61$, $p < 0.001$) indicates that socially responsible practices strongly contribute to achieving sustainability goals. This finding

underscores the critical role of incorporating CSR into organizational strategies to enhance sustainable outcomes.

Additionally, the results show that CSR significantly influences KM, with a path coefficient of ($B = 0.987$, $SD = 0.046$, $T = 21.46$, $p < 0.001$). This robust relationship highlights the importance of CSR in driving effective KM practices, which are essential for organizational success and innovation.

Finally, the analysis confirms that KM significantly affects SD ($B = 0.452$, $SD = 0.099$, $T = 4.554$, $p < 0.001$). This result emphasizes the pivotal role of KM in fostering SD by ensuring the effective utilization and dissemination of knowledge to address sustainability challenges. All hypotheses are supported, demonstrating the interconnectedness of these key dimensions in the organizational context.

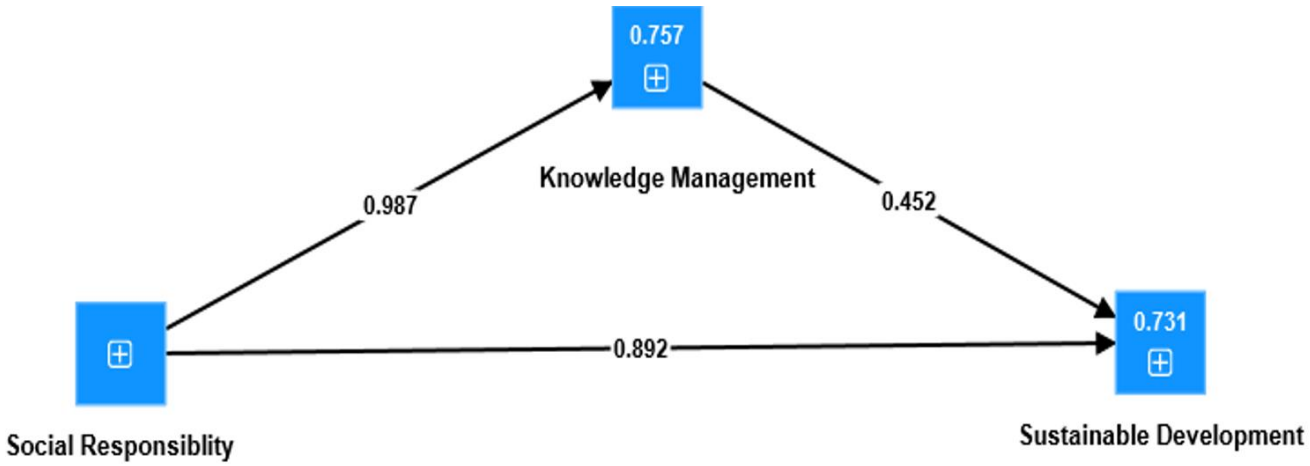


**Figure 2.**
Path analysis.

### *4.6. Mediation Analysis*

**Table 9.**
Mediation analysis.

| | | path | B | SD | T | P |
|---|---|---|---|---|---|---|
| H4 | CSR -> KM -> SD | Pa*b | 0.446 | 0.103 | 4.319 | 0.000 |

The results of this study indicate a close relationship between corporate social responsibility, KM, and SD. It was found that implementing CSR practices contributes to enhancing the efficiency of KM processes within organizations, which positively impacts the achievement of SD goals. The results showed that KM plays an effective mediating role between CSR and SD, indicating an indirect effect of CSR through institutional knowledge channels. This finding is consistent with previous literature, as González-Ramos, et al. [21] indicated that CSR, with its economic, social, and environmental dimensions, is closely linked to KM strategies—both exploratory and exploitative which, in turn, enhance innovation capabilities within organizations. Meanwhile, the results of Widyanti, et al. [19] showed that KM dimensions, such as knowledge generation, storage, and application, had a direct impact on corporate sustainability, particularly in large industrial settings. In the same context, Atkociuniene and Mikalauskiene [12] explained that knowledge sharing is a key element in achieving the three dimensions of SD. They pointed to the importance of building supportive knowledge systems within organizations to integrate the environmental, social, and economic objectives of SD. While Ayobami, et al. [17] study also emphasizes the importance of KM as a key tool in supporting the implementation of the SD Goals by fostering partnerships and knowledge sharing, Al Yami and Ajmal [18] concluded that knowledge processes, such as generation, sharing, and use, contribute to increased operational efficiency and SD in organizations. Furthermore, the results of this study indicate that CSR not only directly impacts SD but is also an important catalyst for KM, which subsequently reflects on SD. This finding is somewhat consistent with the findings of Lestari [6] study, which found that compliance with legal frameworks in implementing CSR leads to improved internal operations, increased community trust, and enhanced institutional cohesion factors that indirectly contribute to long-term sustainability. Based on the above, the results of this study confirm that organizations seeking to achieve comprehensive sustainability should invest in CSR practices not only for their direct impact, but also for their strategic role in activating organizational knowledge, an intangible yet pivotal resource in addressing environmental, social, and economic challenges.

## 5. Conclusion and Suggestions

The study concluded that SR represents an important driver for enhancing KM, which in turn is an effective tool for achieving SD in organizations. The results demonstrated that the relationship between SR and SD is not limited to direct influence but rather extends through KM, which serves as the dynamic link between these two variables.

Accordingly, organizations, particularly those operating in contexts similar to the Yemeni environment, are recommended to integrate SR strategies into their strategic priorities and work to develop their internal knowledge structure as one of the influential factors in the transition towards SD. Understanding the interactions between these three dimensions contributes to building an integrated management model that enhances the effectiveness of institutional performance and ensures its long-term sustainability.

Despite the important scientific and applied contributions this study makes, it is not without some limitations that should be taken into consideration. First, the study was limited to a single group of companies in Yemen, which may limit the generalizability of the results to other sectors or countries with different organizational characteristics. Second, this study relied on a questionnaire method to collect data, which may limit the depth of understanding that can be gained through qualitative tools such as interviews or direct observation.

Regarding future directions, the authors suggest conducting further studies that examine organizations in various sectors inside and outside Yemen to examine the extent of variation in impacts due to variations in organizational culture.

More complex analytical models could be developed in the future using longitudinal data to understand the temporal changes in the relationship between the three variables. Furthermore, exploring the interactive role of other mediating or moderating variables, such as corporate culture or digital transformation, may open new avenues for a deeper and more comprehensive understanding of the nature of the relationships between social responsibility, KM, and SD.

## References


[1] H. Aguinis and A. Glavas, "On corporate social responsibility, sensemaking, and the search for meaningfulness through work," *Journal of Management*, vol. 45, no. 3, pp. 1057-1086, 2019. https://doi.org/10.1177/0149206317691575

[2] S. Singh and S. K. Yadav, *Corporate social responsibility*. Cham: Springer, 2024, pp. 263-267.

[3] A. Paruzel, L. Schmidt, and G. W. Maier, "Corporate social responsibility and employee innovative behaviors: A meta-analysis," *Journal of Cleaner Production*, vol. 393, p. 136189, 2023. https://doi.org/10.1016/j.jclepro.2023.136189

[4] M. Yousefian, M. Bascompta, L. Sanmiquel, and C. Vintró, "Corporate social responsibility and economic growth in the mining industry," *The Extractive Industries and Society*, vol. 13, p. 101226, 2023. https://doi.org/10.1016/j.exis.2023.101226

[5] C. Rubach, "Corporate social responsibility and their types," *Global Science Research Journal*, vol. 7, no. 1, pp. 3-4, 2022.

[6] P. A. Lestari, "Legal dimensions of CSR: Impacts on corporate performance and stakeholder trust," *Sinergi International Journal of Law*, vol. 2, no. 4, pp. 338-349, 2024. https://doi.org/10.61194/law.v2i4.727

[7] H. Aguinis, D. E. Rupp, and A. Glavas, "Corporate social responsibility and individual behaviour," *Nature Human Behaviour*, vol. 8, no. 2, pp. 219-227, 2024. https://doi.org/10.1038/s41562-023-01802-7

[8] T. D. Tai, "Impact of corporate social responsibility on social and economic sustainability," *Economic Research*, vol. 35, no. 1, pp. 6085-6104, 2022. https://doi.org/10.1080/1331677X.2022.2046480

[9] S. L. Indarto, G. Y. P. Asmara, and A. J. Purwoko, "The role of corporate social responsibility in supporting SDGs: A propriety and fairness perspective," *Journal of Lifestyle and SDGs Review*, vol. 5, no. 1, p. e02794, 2025. https://doi.org/10.47172/2965-730X.SDGsReview.v5.n01.pe02794

[10] D. A. M. A.-K. Hamed, "The impact of applying the principles of good governance in achieving sustainable development: an applied study of international organizations operating in Yemen," *Sana'a University Journal for Humanities*, vol. 2, no. 2, pp. 58-85, 2024. https://doi.org/10.59628/jhs.v2i2.914

[11] O. Andreea and D. Gabriela, "Sustainable development versus sustainable economic growth–conceptual distinctions and debates," *Annals of "Constantin Brancusi" University of Targu-Jiu Economy Series*, vol. 20, no. 5, pp. 87–94, 2020.

[12] Z. O. Atkociuniene and A. Mikalauskiene, "Knowledge management influence on implementing sustainable development means in the organization," *Transformations in Business & Economics*, vol. 18, 2019.

[13] M. Ibn Lebbad and I. Nabawiya, "The role of knowledge management in achieving sustainable development," *Numerus Academy Review*, vol. 1, no. 1, pp. 43–63, 2020.

[14] M. Kamal and M. Asohr, " Knowledge management as an input for achieving sustainable human resource development in educated organizations: Case study EIMS sanitary equipment industrial, the branch of ENIEM Ain Defla," *Journal of North African Economics*, vol. 16, no. 22, p. 239-258, 2020.

[15] K. Wang, O. R. Hjelmervik, and B. Bremdal, *Introduction to knowledge management: Principles and practice*. Trondheim, Norway: Tapir Academic Press, 2001.

[16] L. Pais, D. Costa, and P. N. Ramos, "The contributions of knowledge management to the sustainable development goals," *European Journal of Applied Business & Management*, vol. 9, no. 1, pp. 74–91, 2023.

[17] O. F. Ayobami, O. T. Toyese, and O. F. Onyeisi, "The important of knowledge management as a panacea for sustainable development," *Annals of Social Sciences & Management Studies*, vol. 3, no. 4, pp. 97-102, 2019.

[18] M. Al Yami and M. M. Ajmal, "Pursuing sustainable development with knowledge management in public sector," *VINE Journal of Information and Knowledge Management Systems*, vol. 49, no. 4, pp. 568-593, 2019.

[19] R. Widyanti, I. Rajiani, and B. Basuki, "Green knowledge management to achieve corporate sustainable development," *Journal of Infrastructure, Policy and Development*, vol. 8, no. 2, p. 2844, 2024.

[20] A. Weina and Y. Yanling, "Role of knowledge management on the sustainable environment: Assessing the moderating effect of innovative culture," *Frontiers in Psychology*, vol. 13, p. 861813, 2022.

[21] M. I. González-Ramos, M. J. Donate, and F. Guadamillas, "The interplay between corporate social responsibility and knowledge management strategies for innovation capability development in dynamic environments," *Journal of Knowledge Management*, vol. 27, no. 11, pp. 59-81, 2023. https://doi.org/10.1108/JKM-08-2022-0637

[22] S. Ashurov, O. S. H. Musse, and T. Abdelhak, "Evaluating corporate social responsibility in achieving sustainable development and social welfare," *BRICS Journal of Economics*, vol. 5, no. 2, pp. 77-102, 2024. https://doi.org/10.3897/brics-econ.5.e121429

[23] H. Tian, T. R. Pertheban, and X. Han, "Navigating industrial performance: Impact of corporate social responsibility on sustainable development with moderation of reverse supply chain management," *Corporate Social Responsibility and Environmental Management*, vol. 32, no. 1, pp. 1346-1357, 2025. https://doi.org/10.1002/csr.3000

[24] H. Dinçer, S. Yüksel, U. Hacioglu, M. K. Yilmaz, and D. Delen, "Development of a sustainable corporate social responsibility index for performance evaluation of the energy industry: A hybrid decision-making methodology," *Resources Policy*, vol. 85, p. 103940, 2023. https://doi.org/10.1016/j.resourpol.2023.103940

[25] K. J. Hayes, *Introduction. In Kevin J. Hayes (Ed.), The oxford handbook of early American literature*. Oxford; New York: Oxford University Press, 2012.