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Systematic Review of Environmental Uncertainty, Environmental Management Accounting and Sustainable Performance

Abdulwahab Razzaq Alwan[1], Ruhanita Maelah[2]

Abstract

Sustainable performance has emerged as a critical concern in the modern era. Consequently, numerous scholars and researchers are exploring innovative approaches across various disciplines within the social and applied sciences. While the advantages of environmental management accounting (EMA) are well-documented, environmental uncertainty is insufficiently studied yet in many countries and industries. This systematic review seeks to identify the barriers, including environmental uncertainty, that hinder the implementation of EMA practices. Additionally, it examines the scholarly flow and publication toward literature enrichment and practical implementations. The study complies with the Preferred Reporting Items for Systematic Reviews (PRISMA) guidelines. conducted on fifty-one primary articles from Web of Science, Science Direct, and ProQuest databases published in the period 2000-2024. The findings reveal several compelling reasons for adopting EMA to improve sustainable performance, despite challenges like environmental uncertainty that obstruct the implementation of effective EMA practices toward performance sustainability..

Keywords: *Environmental Uncertainty, EMA, Sustainable Performance.*

Introduction

Both in developed and developing nations, the economic and industrial sectors have undergone substantial changes over the last 20 years. While the introduction of new products and services has improved living standards, these innovations have also had negative impacts on the environment. In particular, the oil and gas industry has contributed to environmental issues such as rising greenhouse gas emissions, overuse of natural resources, and increased production of waste and pollutants. These challenges, coupled with environmental uncertainty, have significant implications for climate change mitigation and organizational sustainability. (EMA) is a strategy that has become increasingly popular recently. EMA was introduced by the US Agency for Environmental Protection (EPA) in the early 1900s. The EPA worked for the adoption of EMA in more than 30 countries through a range of initiatives aimed at enhancing environmental management in social businesses and the corporate sector (Javed et al. 2022). Qian, Hörisch, and Schaltegger's (2018) highlighted how crucial it is to match financial decisions with environmental goals to improve organizational sustainability. Similarly, Tarmuji, Maelah, and Tarmuji (2016) argued that budget implementation is essential to transform environmental goals into actionable plans and allocate resources efficiently within firms. Unfortunately, short-term economic priorities often overshadow long-term sustainability goals, resulting in resource misallocation and detrimental effects on both the environment and society. To solve this problem, a thorough framework that encourages the adoption of preventative actions in line with sustainable performance principles is desperately needed. This study argues that the suggested framework can provide useful direction for practitioners and policymakers who want to promote sustainable performance by utilizing best practices and current knowledge in EMA.

The study seeks to evaluate the extent to which the post-2015 framework incorporates EMA, spending tracking, and accountability. Through a comprehensive analysis of various case studies and quantitative examination of new data sets, it investigates the nexus between outcomes, transparency, spending, and monitoring (Noor et al., 2022). Specifically, it examines whether closer monitoring of public spending on the Millennium Development Goals leads to more funds being allocated to achieving the goals and whether this ultimately results in improved sustainable performance outcomes (Lee 2020). Governments would be

[1] Faculty of Economics and Management/ Universiti Kebangsaan Malaysia/ Malaysia. Email: p114312@siswa.ukm.edu.my.
[2] Faculty of Economics and Management/ Universiti Kebangsaan Malaysia/ Malaysia. Email: ruhanita@ukm.edu.my.

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able to utilize this framework to effectively allocate resources, thereby promoting economic prosperity, social justice, and environmental conservation while advancing sustainable performance goals.

Literature Review

The main concepts to be reviewed in this article are sustainable performance, environmental uncertainty and environmental management accounting. These concepts constructing the review and framing the keywords of the research.

Sustainable Performance

Sustainable performance defined as the flexible organizational performance according to the economic, social and environmental orders in the business world (Spreitzer, & Porath, 2012). Sustainable performance highly considered stated in Ibrahim, et al., (2023), where the industries struggling to sustain their core business and control the predictors and indicators of their economy. The huge sources available been misused by the institutions and people in charge regardless for their own benefits or pushing toward a situation might get their benefit attained especially in the effective industries such as oil and gas, production, and finacial sources (Majeed, et al., 2023). Sustained employement and managerial practices resulted as more consistency in the task achievement (Omar, et al., 2021; Ibrahim, & Ali, 2021). The employee's high performance reflected on organizational higher performance and leeds to the nation's higher performance as well toward prosperity and booming all industries in the existence of plenty sources and success materials (Almadaat, & Ibrahim, 2021).

Environmental Uncertainty

Inman, & Green, (2022) defined it as the truculence and continuous changes in the business environment. Rasi, Abbasi, and Hatami, (2019) broadens the definition to include the incapacity to ascertain with some degree of certainty the probability of how environmental elements impact a decision-making unit's success or failure. The three most popular definitions of environmental uncertainty, according to Milliken (1987), in a landmark work on uncertainty, are (1) the inability to assign probabilities to the likelihood of future events, (2) a lack of knowledge about cause-and-effect relationships, and (3) the inability to accurately predict the outcomes of a decision. Given that it places undue pressure on businesses and supply chains to successfully handle the unknown, this is undoubtedly a severe issue (Panda and Rath, 2018). Businesses are consequently forced to deal with these challenges as effectively as they can (Mukhejri and Mukherji, 2017).

Environmental Management Accounting

Nyakuwanika, et al., (2021) EMA is a general phrase that encompasses both physical and monetary EMA. The environmental components of organizational operations that are stated in monetary terms are addressed by monetary environmental management accounting, or MEMA. Since it covers topics including tracking and handling expenses and income deriving from the business's environmental effect, it serves as the foundation for most internal management choices (Burritt et al., 2019). Falih Chichan and Alabdullah (2021) examined the function of administrative accountants in economic units' environmental management and the significance of their knowledge in advancing sustainable development. According to the study, EMA is the process of managing both the environment and economic performance through the adoption and advancement of environmentally friendly accounting procedures and systems, which may include auditing and reporting certain businesses. As a major source for enhancing environmentally sound industrial activities and their competitiveness, EMA is one of the most important relatively recent subjects. This has resulted in the introduction and proliferation of green or environmentally friendly products. EMA "is a direct growth of MA as management accountants may apply their experiences and also their skills to develop the quality of environmental data in the making of a decision process related to the valuation of the investment, capital budget preparation, and strategic management," according to Tsui (2014) and Gunarathne, Lee, and Hitigala Kaluarachchilage (2021).

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Methodology

According to Creswell (2013), qualitative research inquiries are inherently flexible, fluid, and less focused on specific subcategories or topics of study. Sub-questions can be instrumental in addressing issues and challenges, helping to clarify the intended information, and facilitating the identification, investigation, or characterization of a process. Mantzoukas (2008) emphasized that researchers must carefully consider the organization, content, and interrelationship of the various elements within their research. When applied to the study of EMA and environmental uncertainty, these principles suggest the need for a nuanced approach that carefully explores how these factors interact and influence organizational practices and outcomes.

Toward achieving the research aims, the published articles relevant to the three main keywords of this research namely sustainable performance, environmental uncertainty, and environmental management accounting will be systematically reviewed. The goodness of systematic review is disclosing the procedures of the review showing the specific field to be studied where this review style where mostly used in business and management studies.

First, the review timeframe is limited to papers published between 2000 and 2024. The review was conducted on English language papers only, in certain databases only ProQuest, Web of Science, and ScienceDirect which are the higher-rated databases to publish the managerial and business publications. Xiao and Watson (2019) emphasize the necessity of conducting a systematic search across multiple databases, as no single database is entirely comprehensive. Second, the researcher critically used keywords as the criteria of the articles to be reviewed (sustainable), (performance), (environmental), (uncertainty), (management), (and accounting) to be found in the article's title while considering the possible variance. According to Wanden-Berghe and Sanz-Valero (2012), researchers should strike a compromise between thoroughness and accuracy when developing their search strategy.Figure 1 shows the research process for this study.

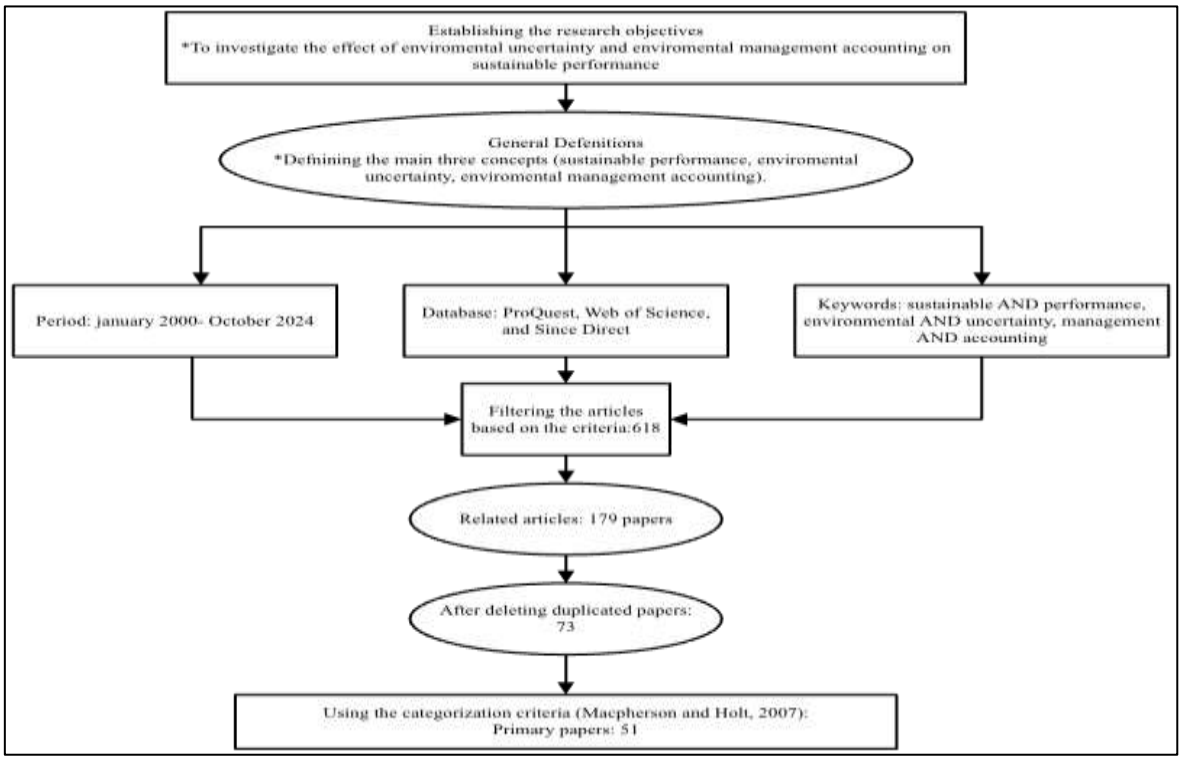

Figure 1: Summary of the research process

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In the process of selecting and refining keywords, researchers enhance the fundamental terms used during the identification stage. Expanding the range of search terms can increase the number of potential publications retrieved from databases. These terms are used by the form AND to get both two terms in the same article. The following step is the criteria and categorizing the articles based on the requirements of the research. The related papers to the core systematic review conducted only 479 papers were found directly relevant. The next step is eliminating the duplicated papers to be 73 papers only relevant to the title of the current research. After that, we thoroughly examined these papers using Macpherson and Holt's (2007) categorization criteria. where keyword searches, title and abstract analysis, and an iterative process are used to further evaluate the obtained articles against the inclusion and exclusion criteria. The authors choose this classification system primarily because of its many benefits: It creates a uniform method for classifying pertinent references, which improves carding efficiency and helps discover the most significant and pertinent material, hence strengthening a review's rigor by offering methodically produced data to back up claims that are directly tied to the research topics; These criteria increase the impartiality of evaluating the calibre of the pertinent Decide on the goals of the study:

The review process is systematic and includes extensive databases, filtering of relevant articles, and assessment of the quality of selected papers. The evaluation criteria for quality include methodological rigor, relevance to the study topic, and clarity of results. This protocol serves as a comprehensive strategy that identifies the important factors and components to include in the review. The protocol is specifically designed to meet our research needs.

Results

The descriptive analysis of the articles reviewed in this study shows the country and year of publication. Figure X shows the distribution of reviewed articles based on country. …….

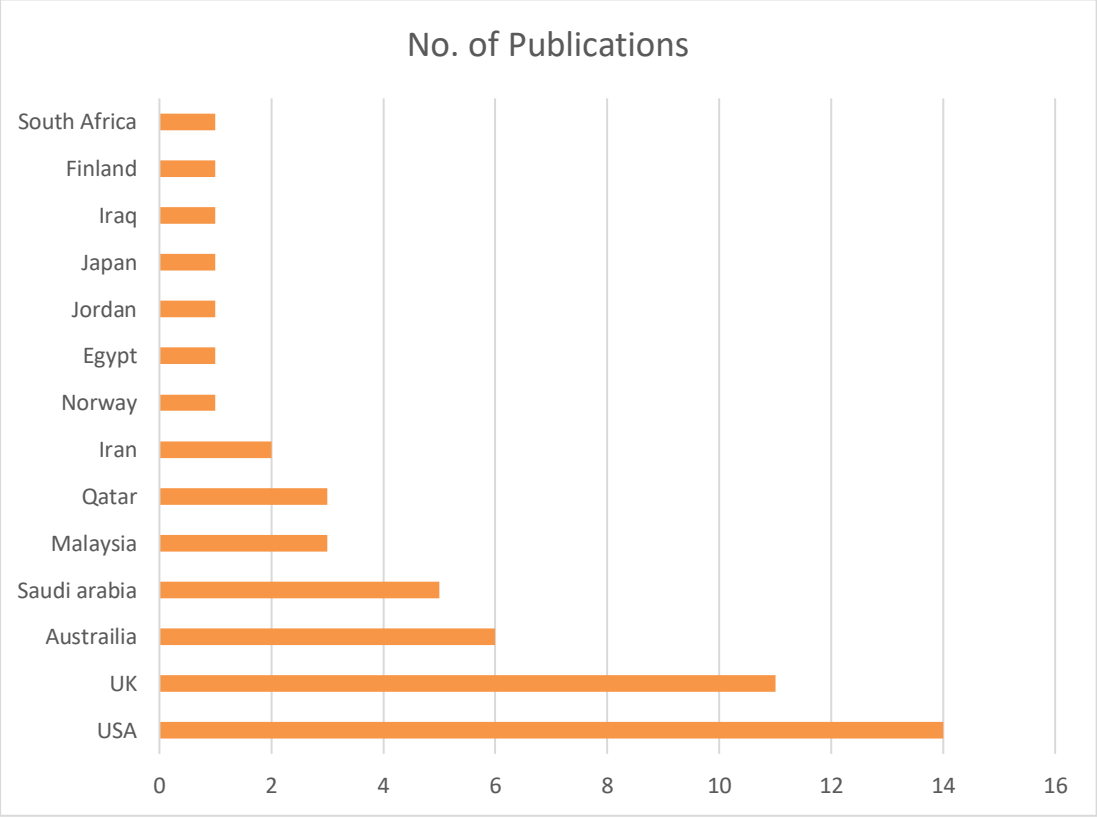

Figure X: Publications based on country

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The graph shows the countries that make the largest contributions to environmental uncertainty, considering (EMA) and sustainable performance. The formulation of the analysis is summarized as follows, as shown in the figure, with the largest volume of research in this area coming from the US, then significant contributions from the UK, Australia, Saudi Arabia, and Malaysia. In addition, countries such as Qatar, Iran, Norway, Egypt, and Jordan also contributed a significant number of articles. Other contributors include Japan, Iraq, Finland, and South Africa. With the United States, the United Kingdom, and Australia at the forefront of the scientific discussion, this distribution demonstrates a strong research presence in both established and emerging economies. The involvement of nations like Saudi Arabia, Malaysia, and Qatar indicates the growing interest of emerging markets in environmental management and sustainable performance. At the same time, contributions from countries such as South Africa, Egypt, and Iran show that sustainability issues are also becoming increasingly important in these areas, as balancing sustainable performance, environmental uncertainty, and environmental management accounting becomes more important. This interpretation highlights the diversity in geographic representation and provides a fair summary of the countries that have made the largest contributions in the region, indicating interest in the convergence of sustainability, environmental uncertainty, EMA, and environmental challenges around the world.

Figure xx shows the distribution of publications based on the year of publication.

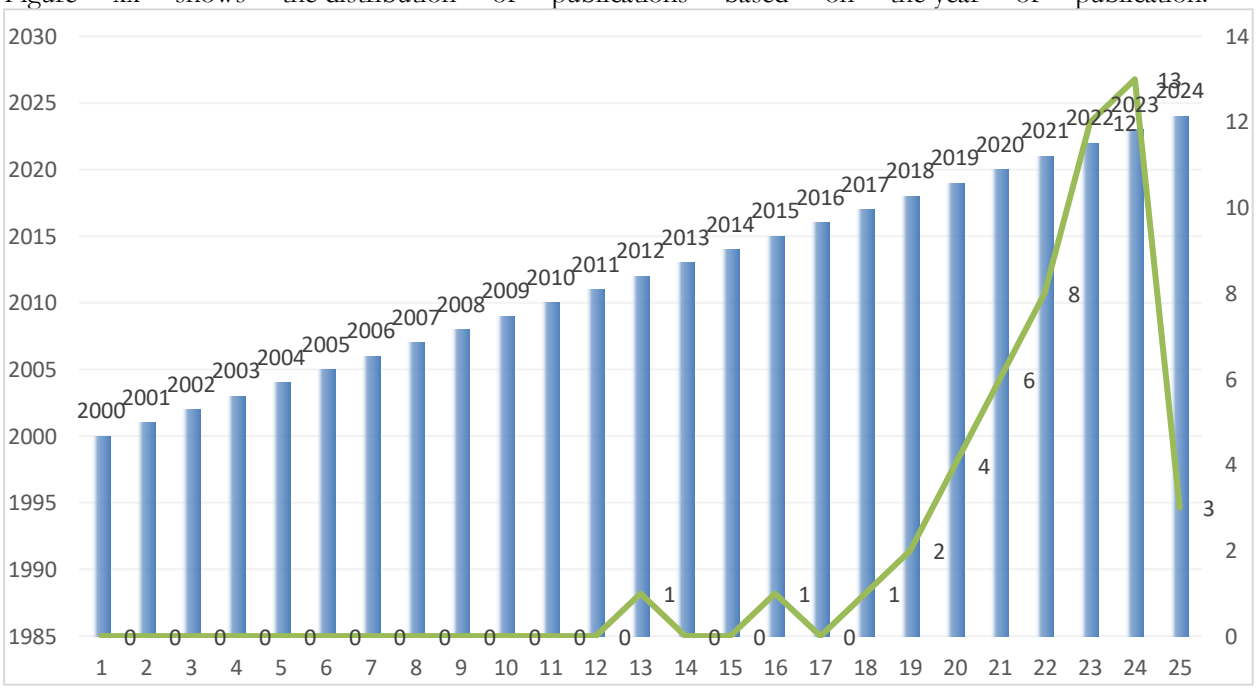

Figure XX: Publications based on year of publication

This systematic review is considered rigorous and reliable when well-established review methodologies, such as the BEME Collaboration, the Joanna Briggs Institute, the Campbell Collaboration, and the Cochrane Collaboration are used. The adoption of multiple review protocols offers several advantages, including enhancing the robustness of the review process, reducing bias in data selection and analysis, and facilitating potential replication by other researchers for cross-validation and verification purposes (Page et al., 2020). In essence, the review protocol is a comprehensive blueprint for developing EMA and overcoming environmental uncertainty to achieve sustainable performance requirements presented in Figure 2 and it's been clarified in the methodology earlier that the articles all contain sustainable performance as this paper's main objective to be achieved. Furthermore, each of the articles contains either environmental uncertainty or EMA, or both. The articles integrating environmental uncertainty and sustainable performance rarely existed in the literature, with 9 articles being observed in the databases. The majority of the articles were published, 42 articles examined EMA and sustainable performance in several industries.

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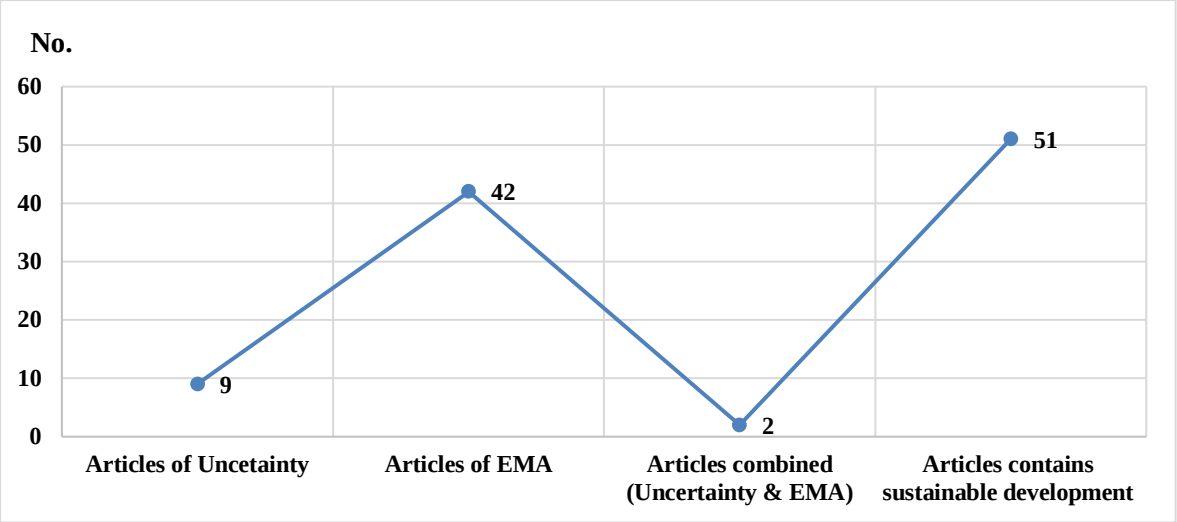

Figure 2: The details of the articles being reviewed 2000-2024

Based on Page et al. (2020), any modifications to the protocol made throughout the review process will be properly recorded and supported by clear explanations. The review initially finds indication of a paucity of studies that explicitly examine the function and nexus between EMA and sustainable performance in recent years relationship between EMA, environmental uncertainty, and sustainable performance was rarely studied and explored as shown in Figure 3. The findings highlight the need for further investigation into how Environmental uncertainty can be mitigated using EMA's principles into tangible achievements to enhance sustainable performance. Higher-level research in this area could provide practitioners and academics alike with important new perspectives on how to improve the effectiveness of environmental management plans within corporate financial structures. In sum, a more comprehensive study in this area is still needed although the existing literature provides some insights into environmental uncertainty and its implications for EMA and sustainable performance.

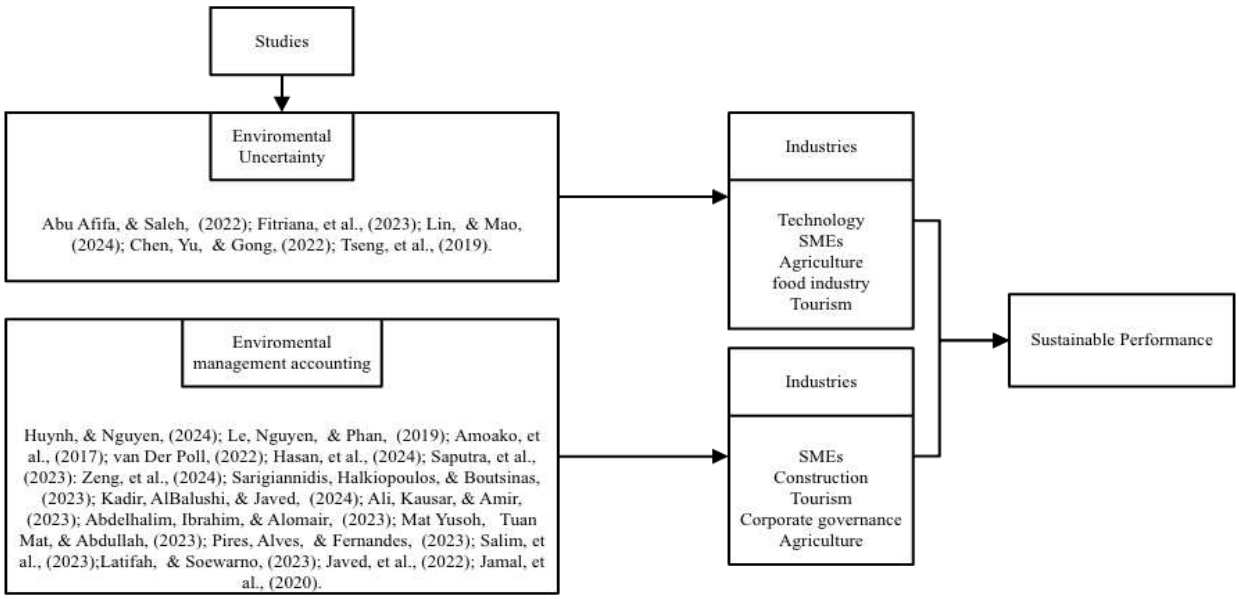

Figure 3: Selected studies under review

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Through a critical evaluation of a subset of publications and research papers, this study identifies areas of interest and future research directions, ultimately enhancing knowledge of how environmental uncertainty and EMA affect sustainable performance outcomes and environmental management strategies. Integrating EMA practices that support sustainable performance by reducing the risks of environmental uncertainty in a manner consistent with the requirements of sustainable performance based on the current findings. The development of EMA, reducing the likelihood of environmental uncertainty, and enhancing sustainable performance are important indicators of the extent to which EMA practices and reducing environmental uncertainty are met.

Conclusion

The articles conclude the paucity of studies integrating EMA and environmental uncertainty toward sustainable performance, where the researchers confirmed the existing critical effect resulted by combining two factors to sustain the organizational performance in certain industries. More studies should examine environmental uncertainty been observed as an influencing factor to sustainable performance. Thus, future researchers should widen the research to be conducted in crucial industries in different countries to highlight the impact of integrating environmental uncertainty and EMA on sustainable performance. As well as future research is recommended to concentrate on the direct and indirect influence of environmental uncertainty on sustainable performance. This study examines recent works of literature on EMA, environmental uncertainty, and sustainable performance. The goal is to contribute to the field of studies that emphasize the theoretical and practical alignment of sustainable development initiatives.

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References

Christ, K.L. & Burritt, R.L. 2013. Environmental management accounting: The significance of contingent variables for adoption. Journal of Cleaner Production 41: 163–173.

Diaz-Iglesias, S., Blanco-Gonzalez, A. & Orden-Cruz, C. 2021. Theoretical framework for sustainability, corporate social responsibility and change management. Journal of Sustainability Science and Management 16(6): 315–332.

Le, T.T. 2018. Applying Environmental Cost Management Accounting in Brick Production Companies-Evidence from Vietnam. Journal of Economics and Sustainable Development www.iiste.org ISSN 9(12).

Lee, H. 2020. The role of environmental uncertainty, green HRM and green SCM in influencing an organization's energy efficacy and environmental performance. International Journal of Energy Economics and Policy 10(3): 332–339.

Levy, Y., Ellis, T.J. (2006): A systems approach to conduct an effective literature review in support of information system research. Inf. Sci. J. 9, 181–212.

Qian, W., Hörisch, J. & Schaltegger, S. 2018. Environmental management accounting and its effects on carbon management and disclosure quality. Journal of Cleaner Production 174: 1608–1619.

Tarmuji, I., Maelah, R. & Tarmuji, N.H. 2016. The Impact of Environmental, Social and Governance Practices (ESG) on Economic Performance: Evidence from ESG Score. International Journal of Trade, Economics and Finance 7(3): 67–74.

Page et al. (2020). Mapping of reporting guidance for systematic reviews and meta-analyses generated a comprehensive item bank for future reporting guidelines. J. Clin. Epidemiol. 118, 60–68

Mantzoukas, S (2008).: Facilitating research students in formulating qualitative research questions. Nurse Educ. Today 28(3), 371–377.

Creswell, J (2013).: Qualitative Inquiry & Research Design: Choosing Among Five Approaches, 3rd edn. Sage Publications, Inc.

Wanden-Berghe, C., Sanz-Valero, J. (2012): Systematic reviews in nutrition: standardized methodology. Br. J. Nutr.107, S3–S7.

Xiao, Y., Watson, M (2019).: Guidance on conducting a systematic literature review. J. Plan. Educ. 39(1), 93–112

Ibrahim, I., Mohammed, A., Abdulaali, H. S., Mohammad, M. M., & Ali, K. (2023). Does Digital Balanced Scorecards Lead To The Sustainable Performance Amongst The Jordanian SMEs?. International Journal of Professional Business Review: Int. J. Prof. Bus. Rev., 8(7), 35.

Majeed, A., Hasan, A., Kadhim, K. G., & Ibrahim, I. (2023, January). Enhancing responsible production sustainability by utilizing Arena Simulation Empirical study in Al-Waha soft drink company. In 2023 International Conference On Cyber Management And Engineering (CyMaEn) (pp. 370-378). IEEE.

Ibrahim, I., & Ali, K. (2021). Reviewing The Role of Media on Employee's Attitude During The COVID-19 Pandemic In Malaysia. Ulum Islamiyyah, 33(S5), 37-47.

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Omar, K., Alzbeidi, A., Abdisamad, N. S., Ahmad, I., & Melhem, B. (2021). The Role of Strategic Partnership in Achieving Security Goals: An Empirical Study of Abu Dhabi Police. International Journal of Contemporary Management and Information Technology (IJCMIT), 1(3), 1-10.

Almadaat, E. M. A., & Ibrahim, I. (2021). Investigation of the relations between organizational culture, innovation, and performance in Jordanian Banking Sector.

Spreitzer, G., & Porath, C. (2012). Creating sustainable performance. Harvard business review, 90(1), 92-99.

Inman, R. A., & Green, K. W. (2022). Environmental uncertainty and supply chain performance: the effect of agility. Journal of Manufacturing Technology Management, 33(2), 239-258.

Rasi, R.E., Abbasi, R. and Hatami, D. (2019), "The effect of supply chain agility based on supplier innovation and environmental uncertainty", International Journal of Supply and Operations Management, Vol. 6 No. 2, pp. 94-109.

Milliken, F. (1987), "Three types of perceived uncertainty about the environment: state, effect, and response uncertainty", Academy of Management Review, Vol. 12 No. 1, pp. 133-143.

Mukherji, A. and Mukherji, J. (2017), "Environmental uncertainty and positive performance of small firms: the role of key mediators", Journal of Organizational Psychology, Vol. 17No. 3, pp. 24-39.

Panda, S. and Rath, S.K. (2018), "Strategic IT-business alignment and organizational agility: from a developing country perspective", Journal of Asia Business Studies, Vol. 12 No. 4, pp. 522-440.

Nyakuwanika, M., van der Poll, H. M., & van der Poll, J. A. (2021). A conceptual framework for greener goldmining through environmental management accounting practices (Emaps): The case of zimbabwe. Sustainability, 13(18), 10466.

Burritt, R.L.; Herzig, C.; Schaltegger, S.; Viere, T. (2019). Diffusion of Environmental Management Accounting for Cleaner Production: Evidence from Some Case Studies. J. Clean. Prod., 224, 479–491. [CrossRef]

falih Chichan, H., & Alabdullah, T. T. Y. (2021). Does environmental management accounting matter in promoting sustainable development? A study in Iraq. Journal of Accounting Science, 5(2), 110-122.

Tsui, Christophor S. K., (2014). , "A literature Review on Environmental Management Accounting (EMA) Adopting", Web Journal of Chinese Management Review, Vol. (17), No. (3) August

Gunarathne, A. N., Lee, K. H., & Hitigala Kaluarachchilage, P. K. (2021). Institutional pressures, environmental management strategy, and organizational performance: The role of environmental management accounting. Business Strategy and the Environment, 30(2), 825-839.

Macpherson, A., & Holt, R. (2007). Knowledge, learning and small firm growth: A systematic review of the evidence. Research Policy, 36(2), 172-192.

Huynh, Q. L., & Nguyen, V. K. (2024). The Role of Environmental Management Accounting in Sustainability. Sustainability, 16(17), 7440.

Le, T. T., Nguyen, T. M. A., & Phan, T. T. H. (2019). Environmental management accounting and performance efficiency in the Vietnamese construction material industry—A managerial implication for sustainable development. Sustainability, 11(19), 5152.

Amoako, K. O., Marfo, E. O., Gyabaah, E. N., & Owiredu-Ghorman, K. (2017). Achieving a sustainable business: The role of environmental management accounting in corporate governance. International Journal of Academic Research in Accounting, Finance and Management Sciences, 7(4), 11-20.

van Der Poll, H. M. (2022). The barriers and drivers of environmental management accounting practices' adoption in developed and developing countries for sustainable development. Sustainable Development, 30(5), 1222-1234.

Hasan, S. A. S., Waghule, S. N., Al Koliby, I. S., Al-Bukhrani, M. A., Al Haifi, M. M., & Hasan, M. B. (2024). Innovating for sustainability: the role of environmental management accounting in driving environmental performance. Discover Sustainability, 5(1), 1-14.

Zeng, Y., Katsumata, S., Li, X., & Zhang, Q. (2024). Supplier–buyer (in) congruence in environmental management accounting for sustainable development in the context of Japan. Sustainable Development.

Sarigiannidis, C., Halkiopoulos, C., & Boutsinas, B. (2023, August). An Environmental Management Accounting System for Sustainable Tourism Based on Business Intelligence. In International Conference of the International Association of Cultural and Digital Tourism (pp. 543-556). Cham: Springer Nature Switzerland.

Kadir, M. R. A., AlBalushi, A. R. S. I., & Javed, S. (2024). Institutional Pressure and Business Sustainable Performance: Does Environmental Management Accounting Matter?. IIM Kozhikode Society & Management Review, 22779752241244878.

Ali, K., Kausar, N., & Amir, M. (2023). Impact of pollution prevention strategies on environment sustainability: role of environmental management accounting and environmental proactivity. Environmental Science and Pollution Research, 30(38), 88891-88904.

Abdelhalim, A. M., Ibrahim, N., & Alomair, M. (2023). The moderating role of digital environmental management accounting in the relationship between eco-efficiency and corporate sustainability. Sustainability, 15(9), 7052.

Mat Yusoh, N. N. A., Tuan Mat, T. Z., & Abdullah, A. (2023). Environmental management accounting system adoption and sustainability performance: triple bottom line approach. Management and Accounting Review (MAR), 22(1), 233-267.

Noor, U., Mansoor, M., & Rabbani, S. (2022). Brand hate and retaliation in Muslim consumers: does offensive advertising matter?. Journal of Islamic Marketing, 13(6), 1395-1413.

Saputra, K. A. K., Subroto, B., Rahman, A. F., & Saraswati, E. (2023). Mediation role of environmental management accounting on the effect of green competitive advantage on sustainable performance. Journal of Sustainability Science and Management, 18(2), 103-115.

Pires, R., Alves, M. C. G., & Fernandes, C. (2023). The usefulness of accounting information and management accounting practices under environmental uncertainty. Journal of Risk and Financial Management, 16(2), 102.

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Salim, K. M., Amir, A. M., Maelah, R., & Jalaludin, D. (2023). Effects of institutional pressures, organisational resources, and capabilities on environmental management accounting for sustainability competitive advantage. International Journal of Business and Society, 24(3), 1284-1313.

Latifah, S. W., & Soewarno, N. (2023). The environmental accounting strategy and waste management to achieve MSME's sustainability performance. Cogent Business & Management, 10(1), 2176444.

Javed, F., Yusheng, K., Iqbal, N., Fareed, Z., & Shahzad, F. (2022). A systematic review of barriers in adoption of environmental management accounting in Chinese SMEs for sustainable performance. Frontiers in public health, 10, 832711.

Abu Afifa, M. M., & Saleh, I. (2022). Management accounting systems effectiveness, perceived environmental uncertainty and companies' performance: the case of Jordanian companies. International Journal of Organizational Analysis, 30(2), 259-288.

Jamal, N. M., Kiet, W. W., Saat, M. M., & Othman, A. (2020). A relationship analysis between green supply chain practices, environmental management accounting and performance. J. Sustain. Sci. Manag, 15(3), 113-131.

Lin, J., & Mao, M. (2024). How does digital transformation affect sustainable innovation performance? The pivotal roles of digital technology-business alignment and environmental uncertainty. Sustainable Development, 32(4), 3163-3181.

Fitriana, R., Zarkasyih, W., Suharman, H., & Sukmadilaga, C. (2023). CSR, risk management quality and corporate sustainable performance: A mediated moderation of corporate performance and environmental uncertainty. Pakistan Journal of Commerce and Social Sciences (PJCSS), 17(4), 849-871.

Chen, J., Yu, K., & Gong, J. (2022). Supply chain slack and sustainable development performance: The "fit–adjust" effect of objective and perceived environmental uncertainties. Corporate Social Responsibility and Environmental Management, 29(5), 1595-1604.

Tseng, M. L., Chang, C. H., Wu, K. J., Lin, C. W. R., Kalnaovkul, B., & Tan, R. R. (2019). Sustainable agritourism in Thailand: Modeling business performance and environmental sustainability under uncertainty. Sustainability, 11(15), 4087.