

THE EFFECTS OF ENVIRONMENTAL, SOCIAL, AND GOVERNANCE ON INTELLECTUAL CAPITAL AND FIRM PERFORMANCE OF COMPANIES IN DEVELOPING COUNTRIES: A SYSTEMATIC LITERATURE REVIEW

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Abstract

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Particularly in the framework of developing nations, the link between environmental, social, and governance (ESG) policies and company performance has attracted increasing interest. Though ESG is generally acknowledged as a driver of sustainable development and long-term value creation (Eccles et al., 2014). However, there is still a need to know how intellectual capital, more especially its human, relational, and structural elements, interacts with ESG projects to affect organisational outcomes. Using a systematic literature review (SLR) using Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) approach, this paper synthesises results from earlier studies on the intersection of ESG practices, intellectual capital, and corporate performance. The study emphasises how, when intellectual capital is closely matched with ESG initiatives, it can greatly improve company performance. Results imply that companies using intellectual capital in line with strong ESG policies can get better both financial and non-financial results, thus supporting sustainable development objectives. The paper concludes that companies trying to maximise the advantages of ESG investments must have an integrated management approach. These revelations add to the body of knowledge already in publication on sustainability and intellectual capital (Lei et al., 2025) and have pragmatic ramifications for managers and legislators in developing nations trying to support ethical and profitable corporate operations.

Keywords: Environmental, Social, Governance, ESG Practices, Intellectual Capital, Firm Performance, ESG Practices in Developing Countries, Sustainable Development

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1. INTRODUCTION

Publicly listed companies play key roles as their formation of global enterprises contributes to the growing nations' economy and stability, and becomes the key source of employment (Borisov et al., 2021). These companies go beyond creating jobs as they also generate the monetary capital required for business expansion and research and development that can strengthen the country's financial well-being (Bokhari, 2022). Moreover, Mensah (2021) asserted that their presence and adherence to regulatory and reporting standards help enhance market transparency and boost investor confidence, promoting fair competition and attracting more investment.

Nevertheless, unlike their counterparts in developed countries, these companies faced global competition and might experience low performance due to a decline in stock prices, which could potentially affect market capitalisation and steer investors away from investing (Murugason et al., 2023). Other factors that could also negatively influence publicly listed companies' performance are social and environmental factors (Tiep et al., 2021). For the past two decades, Ogiemwonyi et al. (2023) reported that an increase in global environmental concerns and awareness has led to social repercussions from the consumption of materials and non-compliance that could result in legal penalties and damaged reputation. As investors and the public increasingly focus on environmental, social, and governance (ESG) factors, companies must balance the need to meet these expectations with the financial and operational challenges of implementing sustainable practices (Rubab et al., 2025).

Worldwide, companies are accountable for their business operations by a range of stakeholders, including shareholders, regulators, employees, customers, and the broader community (Guedes & Grübler, 2025). This accountability is crucial for maintaining trust, ensuring compliance with laws and regulations, and sustaining long-term business success (Mohammad & Wasiuzzaman, 2021). Due to these factors, businesses are concerned with incorporating diverse environmental and social problems into their operations. Numerous studies have also demonstrated that the notion of ESG is central to the dialogue between organisations and stakeholders (Dartey-Baah & Amoako, 2021).

ESG is commonly documented to enhance the economic outcomes of the corporation (Tiep et al., 2021). The evolution of ESG factors made them integral in any company's overall performance as they encompass a wide range of practices and principles reflecting a company's commitment to sustainability, ethical conduct, and responsible governance (Yang & Lindrianasari, 2025). In the literature, there is constant debate about how well ESG criteria can be integrated into investment decisions and whether they influence financial performance. In spite of this rapidly growing interest, it is unclear whether ESG criteria have any impact on business decisions (Ktit & Abu Khalaf, 2024). Among others, the literature showed that ESG has a significant impact on competitive advantage (Bhandari et al., 2022), firm risk (Sassen et al., 2016), firm performance (Al Amosh et al., 2023; Habib & Mourad, 2024), and financial constraints (Zhu et al.,

2023). However, many other factors have received less attention from scholars, including intellectual capital (Karyani & Perdiandiyah, 2022). Therefore, to determine the relationship between intellectual capital and companies' performance, this paper synthesises previous empirical papers on ESG's impacts on developing countries' intellectual capital and firm performance to obtain a better insight into how the factors can be integrated effectively into the companies' operational activities (Seow, 2024).

This paper has the following organization. Section 2 compiles the pertinent literature on ESG, intellectual capital, and company performance, including search strategy and screening criteria. Section 3 describes the approach taken to do the systematic literature review (SLR). Section 4 offers the results together with thematic synthesis. Section 5 addresses the results, their theoretical ramifications, and pragmatic relevance. Section 6 finishes the paper with important observations, restrictions, and recommendations for future studies.

2. LITERATURE REVIEW

Luque-Vílchez et al. (2023) defined ESG as a set of measures used in the process of evaluating a company's operations and long-term sustainability. As these measurements are used by different organisations to examine and control the internal and external factors in the business (Viranda et al., 2020), Arora and Sharma (2022) further explained that they are also used to determine the company's ethics in relation to the company's investments. From a management perspective, the incorporation of ESG, especially by companies in developing countries, could help them move forward and industrialise while achieving sustainable growth and attracting investment.

Aydoğmuş et al. (2022) reported that ESG measurements go beyond evaluating the organisation's health, as they also suggested other traits that would be used to prevent shortcomings and preserve the performance indicators. Generally, the set mainly focused on five key areas, namely: 1) information collection, 2) development of suitable solutions, 3) management of various ESG-related issues related to standard compliance, 4) training opportunities for staff, and 5) good communication between staff and administration. Conducting this assessment is not without challenges, as it requires the environmental department to coordinate actively with other departments in the organisation and portray healthy and balanced sustainability policies with existing corporate goals.

As ESG can not only allow businesses to meet regulatory requirements or please investors, well-implemented ESG practices in companies in developing countries will help them grow and build resilient business models that contribute to sustainable economic development, improve their competitiveness in global markets, and attract capital and talent for continuous development. Therefore, based on the factors forementioned, such as the need to collaborate between departments and reliance on the human factor to ensure the policies are executed effectively, companies should not overlook the importance of human or intellectual capital and their influence on the companies' overall performance (Aman-Ullah et al., 2022).

2.1. Environmental, social, and governance effects on intellectual capital and relational capital

Intellectual capital or resources, in ESG's context, is one of a company's most valuable resources (Mukaro et al., 2023). According to Song (2024) and Tiep et al. (2021), the quality of an organisation's workforce is dependent on how the organisational practices contribute to enhancing and developing their staff's skills, work performance, and competitiveness. Alshaabani et al. (2022) mentioned that companies investing in their employees' well-being, ensuring fair labour practices, and promoting diversity and inclusion tend to have a more engaged and productive workforce. In terms of environment, organisations that focus on creating an inclusive, healthy, and safe workspace for their staff will have a committed and productive team (Gu, 2024). These staff will be less inclined to be absent and tend to be healthier, hence lowering the company's healthcare expenses.

Apart from providing a healthy and supportive working environment, Pimpa (2023) stated that companies within the ESG scope are responsible for giving their staff opportunities to attend training programs that can arm them with sustainability-related skills, for instance, energy conservation, waste management, and green technology, to educate them on the importance of ESG in their roles and responsibilities. In short, when their employers recognise their significance in the companies, the employees will be more willing to contribute, and the training opportunities will help prepare them for their potential roles in a green economy (Arulsamy et al., 2023).

A supportive work environment is not the sole factor that can influence intellectual capital. According to Trkulja et al. (2024), prioritising and investing in diversity, equity, and inclusion (DEI) also contributed to the companies' ESG efforts. Similar to providing training to equip staff with new skills and knowledge, DEI-related policies would see companies investing in recruitment practices to find new talent and give each staff member an equal opportunity for promotions and professional advancement. Moreover, the absence of discrimination and unfair treatment will also make employees feel safe being part of the company.

A company that supports employee professional development and provides work-life balance would attract potential skilled employees and investors who value sustainability. According to Piao et al. (2022), such companies, due to their positive ESG implementation, could experience higher employee retention, reduced recruitment costs, and increased innovation, all of which positively impact the company's bottom line. Staff experiencing these positive work opportunities will be more connected, engaged, happy, and satisfied with their superiors, colleagues, and the organisation they are part of.

Moreover, the positive interaction does not stop with the company and staff, as the company's communication and relationship with the clients are also critical in ensuring a healthy level of ESG and maintaining customer loyalty. Szudrowicz (2020) commented that when companies acknowledged relational capital, one of intellectual capital's main elements, they agreed that the organisation needs its staff to help build a solid and good relationship with their customers, suppliers, and the local community. Kulova and Nikolova-Alexieva (2023) contended that

social practices help improve relational capital by building stronger relationships with customers who increasingly favour companies that align with their values. Moreover, active engagement with local communities can enhance a company's social license to operate and reduce the risk of protests or boycotts that can harm its reputation, brands, and sales. Most importantly, a good relationship means that the important stakeholders trust and may remain loyal to the organisation.

For governance, intellectual capital is strongly influenced by the existing leadership and the company culture. Nabella et al. (2022) pointed out that companies with a healthy corporate culture and leadership, particularly those that value transparency, ethical behaviour, and accountability, could make employees feel valued and respected, leading to higher morale and reduced turnover. Good governance assures that employees are well-renumerated in terms of bonuses and other monetary incentives, which could encourage them to contribute more to the organisation. Furthermore, effective governance practices, such as having an independent board of directors, transparent financial reporting, and strong anti-corruption measures, can reduce the risk of financial scandals, fraud, and legal issues. According to Kassem (2022), companies with strong governance structures are often perceived as more trustworthy by investors, leading to a lower cost of capital and improved access to financing. Moreover, good governance helps align the interests of management and shareholders, ensuring that corporate decisions prioritise long-term value creation rather than short-term gains.

In developing countries, integrating ESG practices into intellectual capital investment is a powerful strategy for driving sustainable business growth and improving the overall well-being of the workforce. Its influence is not limited to human resources, as their roles are critical in building the organisation from within. By focusing on empowering intellectual capital to strengthen environmental stewardship, social responsibility, and strong governance and resilient intellectual capital, companies can build a robust business foundation, which is essential for long-term success and development in developing countries.

2.2. Intellectual capital's effects on firm performance

With regard to ESG, intellectual capital, and firm performance, Fadhillah and Subriadi (2019) asserted that the scope has different overlapping concentric circles, which consist of: 1) organisational effectiveness, 2) business performance, and 3) financial performance. In this study's context, the focus is on the effects of intellectual capital on the company's business as it covers operational and financial performances, hence reflecting the firm's efficiency in managing its organisation and market.

According to Bagh et al. (2017), firm performance can be described as an evaluation of a company's financial performance based on the implemented policies and procedures. Generally, how a firm performs is a reflection of the firm's capabilities in using available human and material resources to meet these financial and non-financial performances (Guterman, 2023). Taouab and Issor (2019) suggested that each firm must prioritise

constructing a performance system as a way of establishing an objective indicator to assess their overall performance accurately. In short, a firm's performance is determined by its ability to exploit existing resources to produce successes compatible with the company's established objectives while also evaluating their relevance to its customers. At this level, the firm's performance relies on intellectual capital, where the management, which is trained to improve organisational performance, contributes to the tasks by using knowledge and transparency to connect or build a healthy relationship with the stakeholders (Nawaz & Ohlrogge, 2023; Rundengan & Tjahjadi, 2023).

Sun et al. (2024) explained that integrating ESG into companies' business strategies could influence their performance as it is beneficial in the long run. ESG helps in minimising the possibilities of risks, improving access to capital, and driving long-term growth (Parikh et al., 2023). For companies operating in developing countries where the markets tend to be unpredictable, well-implemented and strong ESG practices can help companies navigate uncertainties and build a sustainable competitive advantage. From an environmental perspective, Ahmad et al. (2024) explained that the implementation of ESG policies is related to companies adopting environmentally sustainable practices; for example, energy efficiency, waste reduction, and resource conservation can reduce operational costs. Baratta et al. (2023) stated that companies that adopted these greenhouse policies not only benefited from ESG but also earned higher profit margins compared to other organisations that have yet to include similar policies in their daily operations.

Nevertheless, for all these elements to work and come together, intellectual capital remains a crucial component as it is the factor that influences a company's financial performance (Ali et al., 2022). They stated that weak intellectual capital could lead to the company's failure, resulting from poor management and managerial skills. Pham et al. (2024) explained that the firms' favourable performance and achievements might have been a result of good ESG; however, the strategies' success still falls on intellectual capital, as the firm needs the staff to incorporate, generate, transfer, and provide the current and potential stakeholders with the company's short and long-term outcomes.

Wu and Tham (2023) reported that companies adhering to ESG policies are more likely to manage environmental-related risks better than their non-ESG compliance counterparts. They asserted that these companies, particularly those with strong environmental policies, supported by a strong intellectual capital trained to communicate and connect with the stakeholders, are more prepared to handle environmental regulations, problems related to climate change, and a lack of resources. This form of readiness and support not only allows them to perform their operations under the greenhouse laws but also helps prevent the possibility of being fined, sued, and facing unexpected disruptions to their supply chains.

Therefore, by incorporating ESG principles into their operations, enterprises can instill a culture of environmental consciousness and proactively incentivise innovative solutions, enhancing their capacity to adapt swiftly and recover from crises. Moreover, Zhu et al. (2023) believed that companies' performance would be positively influenced by their

good ESG policies, as their stance on environmental conservation as part of their operations tends to appeal to environmentally conscious clients.

2.3. Intellectual capital's effect on firms' structural capital

The next element that benefits from a well-implemented ESG is its impact on the companies' structural capital. Khan et al. (2024) explained that in companies or business organisations, structural capital refers to the non-human assets and resources that contribute to their productivity and efficiency. The non-human assets and resources are the organisational procedures, the organisation's intellectual property, infrastructure, technology, and corporate culture.

With regard to ESG, for the environment, the organisation practising these values tends to invest in green infrastructure where they adopt energy-efficient strategies as part of their daily operations, develop renewable energy sources, and implement sustainability in their supply chains. According to An and Madni (2023), more firms, particularly in China, where environmental degradation occurred due to a lack of green policies, are beginning to understand the significance of conserving the climate and implementing green investment to enhance their economy, social standing with potential clients and investors, and contribution to preserving the country's environment. The researchers believed that to motivate more companies to adopt the green approach, the government should provide incentives such as tax reductions to encourage more firms to make green investments as part of their cooperative strategies. Apart from such incentives, organisations should also do their part by training their workforce to be more environmentally conscious and comply with local environmental regulations. Organisations can also begin to strengthen their structural capital by improving efficiency and reducing dependency on scarce resources (Handoyo et al., 2023).

In terms of social impact, this element relies on the organisation's intellectual capital, which is the staff, to ensure that the green policies are effectively implemented. According to Mukaro et al. (2023), the organisation must educate its workforce about current ESG practices as a way of cultivating a positive corporate culture that encourages the staff to share knowledge, collaborate, and develop innovative ideas to improve their companies' green policy compliance. For companies in developing countries, such training can help minimise the skill gap and enhance knowledge, hence indirectly creating a culture of learning where the staff are willing to engage and communicate with the stakeholders to improve their structural capital (Kang et al., 2022).

For governance, companies with good governance practices will be more open to developing reliable organisational procedures where they are more effective in managing risks and tend to be more compliant with the imposed rules and regulations (Guluma, 2021). Arslan and Alqatan (2020) stated that good and strong corporate governance is critical for companies in developing countries, as organisations with weaker frameworks require such governance to build and maintain structural capital to provide their business and sustainability with a strong foundation. Like most

aspects of good governance practices, it focuses on ensuring that the companies are transparent and accountable in the effort to win current and future stakeholders, including investors, customers, and employees, via improving access to capital, protecting their intellectual properties, and partnerships to remain competitive in the local market (Liu et al., 2023).

Therefore, in the context of ESG practices for structural capital of companies in developing countries, they should focus on using intellectual capital to enhance environmental sustainability, social responsibility, and strong governance to help them build resilient, efficient, and innovative organisational systems that support long-term growth and competitiveness. These investments in structural capital not only contribute to the success of individual companies but also play a critical role in the broader economic development in these regions.

3. METHODOLOGY

Particularly in the framework of developing nations, this study synthesised existing research on the relationship between ESG practices, intellectual capital, and firm performance using an SLR approach. Selected to guarantee a transparent, replicable, and thorough assessment of the literature was the SLR approach (Tranfield et al., 2003).

This paper reviewed and combined different empirical studies related to ESG practices in companies and intellectual capital in the implementation of those policies. This paper specifically aims to identify the ESG's effects on intellectual capital and firm performance, and to what extent its impact contributes to the development of companies in developing countries. Using the qualitative approach, this investigation used the SLR as its research methodology, where the findings from the analyses were thematically analysed and synthesised to determine the relationship between ESG, intellectual capital, and firm performance. For analysis purposes, the search for articles was conducted from 2016 to 2024. The articles were sourced from different databases, for instance for Google Scholar, Elsevier, and other Scopus-indexed journals. The keywords and Boolean

operators used were: ("environmental, social, governance" or "ESG practices") and ("intellectual capital" or "human capital" or "structural capital" or "relational capital") and ("firm performance" or "organizational performance") and ("developing countries" or "emerging economies"). The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) by Krizek and Johnson (2006) (see Figure 1) were used for this analysis. To remove duplicates, the selected articles were screened further based on their titles and abstracts. Therefore, the specific guidelines used are as follows:

- Extensive database search.
- Use of selected keywords to narrow the search based on the topic.
- Articles published between 2016 to 2024.
- Titles and abstracts are screened based on predetermined inclusion and exclusion criteria.
- Data relevant to the research questions are identified.
- Reporting and summarising confirmed data.

3.1. Inclusion and exclusion criteria

The studies were selected based on the following criteria:

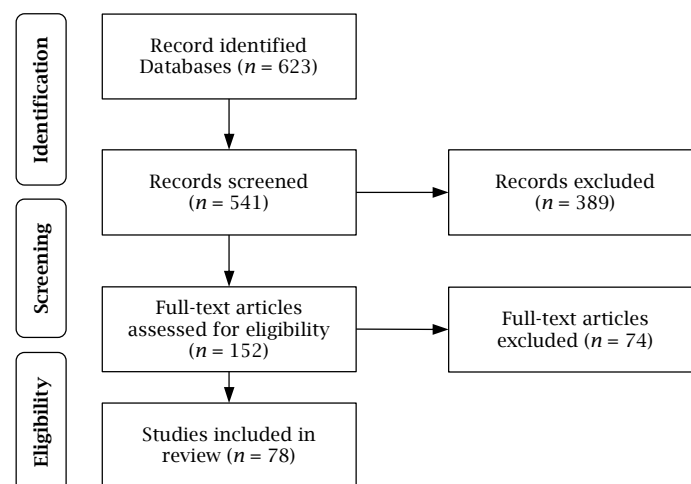
- Peer-reviewed studies written and published in the English language.
- Studies published between 2016 to 2024.
- Studies focusing on topics related to ESG, intellectual capital, and firm performance.

Apart from these criteria, the selection also excluded master's and doctoral theses along with government-published reports.

3.2. Screening and selection process

The search started out turning up 623 papers. There were 541 articles left after deleting repetitions. Abstracts and titles were filtered against the inclusion criteria, limiting the choice to 152 papers. Following a full-text review, 78 studies were judged qualified for a final review. Using the PRISMA framework (Mohamed Shaffril et al., 2021; Page et al., 2021), the selection process is presented in the PRISMA flow diagram (see Figure 1).

Figure 1. Flow diagram of the study



Source: Authors' elaboration.

3.3. Data extraction and synthesis

From the chosen studies, data were methodically extracted, including study goals, methodology employed, and results about firm performance, intellectual capital, and ESG. The results were arranged into four primary categories using thematic analysis:

- 1) Influence of ESG on general organisational performance.
- 2) The part ESG plays in using intellectual capital to apply green policies.
- 3) The impact of ESG on professional growth and employee welfare.
- 4) The way ESG helps structural capital to be used optimally.

These ideas were combined to generate general conclusions and point up areas of future research needed.

4. RESULTS

With reference to the SLR, the findings indicated that ESG practices do have a significant impact on intellectual capital and firm performance. The analyses showed that for the other ESG-related components to be successfully implemented, intellectual capital is the factor that determines the components' successful execution. The findings showed that intellectual capital influences firm performance in several ways, namely: 1) influences overall organisation performance; 2) improves the implementation of green policies; 3) improves staff well-being and provides professional development opportunities; and 4) maximises the use of structural capital to improve the firm's performance.

Table 1. ESG's effects on intellectual capital and firm performance

No.	ESG's effects on intellectual capital and firm performance	Explanation	Study
1	Influences the organisation's overall performance	The studies reported that ESG has a positive impact on organisational performance, particularly when the existing intellectual capital is trained and made aware of the importance of implemented policies in enhancing current investors' and stakeholders' trust. The transparency will also help to attract and convince future investors to consider investing in the companies.	Luque-Vilchez et al. (2023), Viranda et al. (2020), Arora and Sharma (2022), Tiep et al. (2021), Aydoğmuş et al. (2022), Merli and Preziosi (2018), Radzi et al. (2023), Wang et al. (2018), Gebhardt et al. (2022), Aman-Ullah et al. (2022).
2	Improves the implementation of green policies	The studies highlighted that ESG helps intellectual capital to help firms implement green or environmentally friendly policies effectively as part of sustainability.	Ahmad et al. (2024), Baratta et al. (2023), Ali et al. (2022), Pham et al. (2024), Wu and Tham (2023), Zhu et al. (2023).
3	Improves staff well-being and provides professional development opportunities	The studies showed that organisations that invest in improving their intellectual capital tend to be committed and motivated to contribute actively to the organisation. Indirectly, investing in intellectual capital also enhances the relational capital, where the employees will use their knowledge and acquired skills to minimise the relationship gap between the organisation and investors, stakeholders, and clients.	Mukaro et al., (2023), Song (2024), Alshaabani et al. (2022), Gu (2024), Pimpa (2023), Arulsamy et al. (2023), Trkulja et al. (2024), Piao et al. (2022), Szudrowicz (2020), Kulova and Nikolova-Alexieva (2023), Nabella et al. (2022), Kassem (2022).
4	Maximises the use of structural capital to improve the firm's performance	The studies showed that organisations with strong intellectual capital tend to utilise their structural capital effectively to improve their organisational performance.	Khan et al. (2024), An and Madni (2023), Handoyo et al. (2023), Kang et al. (2022), Guluma (2021), Arslan and Alqatan (2020), Liu et al. (2023).

Source: Authors' elaboration.

5. DISCUSSION

The studies reviewed showed that ESG has a positive impact on intellectual capital and firm performance. The findings also revealed that each ESG component is interrelated and that the human factor or intellectual capital is the key factor that connects the components. In short, to meet ESG goals, the intellectual capital should not be overlooked or underestimated, as poor intellectual capital could lead to poor management skills, which, in turn, affects the effectiveness of any implemented ESG initiatives (Buallay, 2019; Drottberger et al., 2021). Therefore, companies should willingly invest in developing intellectual capital in areas like employee training and development, patenting, branding, advanced information system management, expanding networking with customers, suppliers, or alliances, and employing tools to measure intellectual capital (Jordão et al., 2022). Therefore, companies should make an extra effort to ensure that the communication between their employees and

administrators is well-documented to ensure that the information can be used to develop the organisation further (Puntillo, 2023).

The studies also acknowledged that intellectual capital focused on ensuring that intangible resources, either intellectual or knowledge-related, along with skills, are used to complement structural capital that would eventually contribute to the companies' value (Tonelli et al., 2024). For example, in the context of green possibility and sustainability, along with a good rapport with investors, key stakeholders, and consumers or clients, the companies, through their staff, could convince them that the operations are environmentally friendly and that environmental-related issues would be mitigated as soon as possible. Incorporating environment-friendly policies is no longer an option, as clients tend to favour working with companies that demonstrate environmental responsibility (Ferraris et al., 2020).

In terms of intellectual capital per se, companies that value their staff, under governance,

would invest in providing training opportunities, incorporate ethical practices in their corporate policy, and include their staff when making decisions. These practices may not seem important; however, providing an inclusive and diverse work environment can help improve human capital, which can have a positive impact on intellectual and relational capital (Narzary & Palo, 2023).

Finally, enhancing intellectual capital would improve the use of structural capital in the organisation. Structural capital refers to the use of non-human resources such as green technology, databases, or innovation that aim to ease daily operations and improve organisational output and efficacy. The studies pointed out that structural capital's effectiveness relies on the employees' ability to use it; hence, the employees need to be trained to know how to maximise the technology for the best interest of their company (Jordão et al., 2022). Based on these findings and applying them in the context of companies in developing countries, ESG plays a critical role as it can shape and enhance existing intellectual capital, which these companies need to attain long-term success and growth. Therefore, these companies should not ignore the importance of intellectual capital in ensuring that the implemented ESG can be effectively executed and help the business to remain competitive, manage risks well, and conduct operations sustainably (Lei et al., 2025).

Especially in the framework of developing nations, this paper makes several significant contributions to the literature on ESG practices, intellectual capital, and corporate performance. First, it systematically shows that intellectual capital serves as a central enabler for the successful execution of ESG projects, so advancing the theoretical knowledge of the connectivity between ESG practices and intellectual capital. Although earlier studies have looked at ESG and firm performance separately, this study especially emphasises how human, relational, and structural capital together control the effect of ESG on corporate outcomes. Second, the study provides empirical depth using four particular routes through which intellectual capital affects firm performance in ESG environments: 1) enhancing general organisational performance, 2) enabling the implementation of green and sustainable policies, 3) improving employee well-being and professional development, and 4) optimising the use of structural capital. Combining these results from many different studies provides a complete framework previously scattered in the literature. Third, the paper offers a fresh contribution by stressing the important part intellectual capital plays in developing and emerging nations, where ESG practices are becoming more and more important but usually underfunded. For managers and legislators in these areas, it provides practical advice on how strategic intellectual capital investment might propel ESG success, corporate resilience, and sustainable development. Methodologically, this study finally extends the use of the SLR approach to the junction of ESG and intellectual capital research, thus, offering a transparent, orderly, replicable synthesis of current knowledge. Through these contributions, the paper enhances intellectual capital as a main tool for optimising ESG-driven corporate performance and enriches the academic debate on sustainable business practices.

6. CONCLUSION

The important contribution of ESG policies in improving intellectual capital and general company performance is underlined in this systematic review. The results confirm that strong intellectual capital, especially human, relational, and structural elements, which help companies to translate sustainability goals into quantifiable results, is the driving force behind the most effective ESG initiatives. As the foundation of intellectual capital, employees are the main agents of ESG implementation since they help to link internal strategies with stakeholder expectations. Most importantly, the study shows that companies in developing nations have to give strategic management of intellectual capital top priority if they are to fully use ESG frameworks for competitive advantage, creativity, and sustainable development. Businesses that make investments in ethical governance, green technologies, staff development, and stakeholder communication will be more suited to create strong, future-oriented business models. Finally, intellectual capital is a catalyst in operationalising ESG policies rather than only a supporting element. Realising the full value of ESG and making sure sustainability initiatives result in noticeable changes in company performance depends on their fit into corporate strategy.

Although offering significant insights, this study possesses several limitations that facilitate avenues for subsequent research. First, the review only used secondary data from published studies, which means that the results depend on the quality and scope of the literature that is already out there. There may also be publication bias, since studies that find positive links between ESG, intellectual capital, and firm performance are more likely to be published than those that find weak or negative links. Second, the review examined only articles that were published in English between 2016 and 2024. This time and language limit may have left out important work in other languages or older studies, especially those from developing economies. Third, the analysis put together different countries and industries into the broad group of "developing countries". Due to the diversity in governance structures, regulatory frameworks, and cultural contexts, the findings may not comprehensively reflect sector-specific or country-level variations. Finally, the systematic review's qualitative nature contributed to it being challenging to find a cause-and-effect relationship or measure the strength of the ESG-intellectual capital-performance relationship. The extent of these effects is indeterminate in the absence of a quantitative meta-analysis.

Consequently, subsequent research should aim to corroborate and expand upon these findings. Empirical research in developing nations, employing surveys, interviews, and mixed-method approaches, may yield more context-specific evidence regarding the influence of ESG initiatives on intellectual capital and organisational performance. Quantitative meta-analyses are advised to ascertain the strength and direction of these relationships across various regions and sectors. Comparative studies across sectors (e.g., banking, manufacturing, energy) and regions could elucidate how institutional, cultural, and market dynamics influence the ESG-intellectual capital nexus.

Longitudinal research would elucidate the co-evolution of ESG practices and intellectual capital

over time, influencing corporate resilience and competitiveness. As technology becomes more important, future studies ought to enquire into how digital transformation, green innovation, and knowledge management systems work with intellectual capital to help with ESG implementation.

Finally, more attention should be devoted to underexplored aspects of intellectual capital, particularly relational capital and governance-related practices, which are critical for fostering stakeholder trust, transparency, and long-term value creation in developing countries.

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