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REVIEW ARTICLE OPEN ACCESS

Relational Capital and Sustainable Development in Developing Economies: A Systematic Review of Pathways, Practises and Impacts

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ABSTRACT

This study critically examines the role of relational capital (RC) in shaping the sustainable development of small and medium-sized enterprises (SMEs). Although RC is widely recognised as a strategic resource, existing evidence remains fragmented, context-dependent and theoretically underdeveloped. Adopting a systematic literature review guided by the PRISMA protocol, the study analyses 77 articles published between 2012 and 2021 across 39 academic journals, with particular attention to underexplored contexts, such as the Middle East and North Africa (MENA) region. The findings reveal that RC does not exert a uniform effect on sustainability outcomes; rather, its influence is indirect and contingent, operating through mechanisms such as knowledge sharing and innovation that vary across institutional and organisational settings. This heterogeneity limits the generalisability of prior findings and constrains the development of actionable insights. The study reconceptualises RC as a contextually embedded and strategically deployed capability, highlighting the need for integrative and context-sensitive approaches. It proposes a research agenda that emphasises underrepresented regions, longitudinal designs and mixed-methods approaches to better capture the dynamic and multi-dimensional nature of RC, thereby advancing both theory and practise within the sustainability domain.

1 | Introduction

The importance of sustainable development in the Middle East and North Africa (MENA) countries cannot be overstated. Yet, despite the region's increasing economic significance and environmental vulnerability, prior work has largely overlooked these countries, resulting in a limited and fragmented evidence base, often characterised by inconsistent and contradictory findings (Zahoor and Gerged 2021; Kuzey et al. 2025; Uyar et al. 2024; Elsayed et al. 2026). This gap is not merely academic; it has tangible consequences for policymakers and business leaders who lack context-specific guidance on advancing sustainability within

firms operating under distinct institutional and socio-economic conditions (Alshbili et al. 2021; Bastian and Zali 2016; Gerged et al. 2026). Addressing this shortcoming requires research that not only deepens theoretical understanding but also yields actionable insights to inform managerial practise and policy design in the region (Massaro et al. 2016; Gerged et al. 2025).

Against this backdrop, this paper seeks to address a pressing practical question: how can firms, particularly small and medium-sized enterprises (SMEs), leverage their relational networks to enhance sustainability performance in environments characterised by institutional complexity and resource

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constraints? SMEs represent the backbone of most MENA economies, yet they often face significant challenges in accessing resources, knowledge and capabilities necessary for sustainable development (Daou et al. 2014). Relational capital, encompassing relationships with stakeholders, partners and networks, may serve as a critical mechanism for mitigating these constraints (Kale et al. 2000; Elfenbein and Zenger 2014). However, the pathways through which relational capital translates into sustainability outcomes remain insufficiently understood and, in some cases, inconsistently theorised across existing studies (Yusoff et al. 2019; Ali et al. 2021). To address this, the present study conducts a comprehensive review of prior research on the mechanisms and channels by which relational capital influences firms' sustainability performance across various MENA countries, with particular emphasis on SMEs.

Reviewing relevant literature on the influence of relational capital on the sustainability performance of SMEs holds paramount importance in both academic and professional contexts. This critical endeavour enables researchers, practitioners and decision-makers to better grasp the complex interplay between relational capital and sustainability outcomes within SMEs (Klewitz and Hansen 2014; Kuzma et al. 2020), an understanding that is increasingly vital in a business landscape shaped by environmental pressures, stakeholder expectations and regulatory change. By systematically synthesising existing studies, this review aims not only to consolidate fragmented knowledge but also to translate it into insights that are meaningful for real-world decision-making (Massaro et al. 2016).

From an academic perspective, examining relevant literature on the impact of relational capital on sustainability performance advances knowledge in several key ways. First, literature reviews establish a robust theoretical foundation by synthesising existing studies, theories and conceptual frameworks (Bilal et al. 2024). This process helps researchers identify critical gaps and enables the development of more refined, contextually grounded theoretical perspectives (Massaro et al. 2016). Second, by reviewing the research methodologies employed in prior studies, scholars can identify effective approaches, data sources and measurement techniques (Donthu et al. 2021), thereby improving the rigour and reliability of future empirical investigations. Third, literature reviews clarify key concepts and constructs related to relational capital and sustainability performance, fostering a shared understanding that enhances scholarly dialogue and cumulative knowledge building (Dharmani et al. 2021).

Equally important are the practical implications of this review. For SME managers and decision-makers operating in the MENA region, understanding how relational capital can be strategically mobilised is not an abstract concern but a pressing managerial challenge (Shashi et al. 2019). Literature reviews play a crucial role in bridging the gap between theory and practice by distilling evidence on what works, under what conditions and why (Massaro et al. 2016). First, they enable managers to better understand the benefits and trade-offs of leveraging relational capital (Gold et al. 2020), thereby supporting more informed decisions regarding partnerships, stakeholder engagement and resource allocation. Second, by identifying best practises and effective strategies, literature reviews provide a foundation for developing practical frameworks and policies to enhance SMEs' ability to generate

sustainable value (Hasan et al. 2021). Third, they highlight potential risks and limitations of relational capital, equipping practitioners with the foresight to anticipate challenges and design effective mitigation strategies (Barrena-Martínez et al. 2020).

Given the rapid growth of SMEs in developing economies, particularly within the MENA region, it is essential to critically assess their role in driving sustainable development outcomes (United Nations 2021). This study reviews 77 relevant papers published between 2012 and 2021, focusing on relational capital, knowledge sharing, innovation and sustainable development. Through a systematic literature review, the paper identifies key gaps in our understanding of the mechanisms linking relational capital to sustainability performance in MENA countries (Yaseen et al. 2016; AlQershi et al. 2021). By doing so, it not only contributes to academic debates but also highlights specific areas where future research can yield insights of direct practical relevance to firms and policymakers alike.

This study makes several important contributions to the literature on relational capital and sustainability. First, it challenges the prevailing assumption that relational capital is a universally beneficial, direct driver of sustainability performance by demonstrating that its effects are fragmented, context-dependent and often mediated by knowledge sharing and innovation processes. Second, by synthesising evidence across developed, developing and particularly underexplored MENA contexts, the study addresses a significant geographical and contextual bias in the literature, which has largely been dominated by findings from developed economies. In doing so, it extends current understanding by highlighting how institutional conditions, such as regulatory frameworks, cultural norms and political stability, shape both the formation and effectiveness of relational capital. Third, drawing on insights from Institutional Theory and Resource Dependence Theory, the study reconceptualises relational capital as a contextually embedded and strategically deployed capability through which firms manage external dependencies and navigate institutional constraints. Finally, by identifying inconsistencies and unresolved tensions in prior research, the study advances the literature by calling for more integrative frameworks that incorporate multiple mediating and moderating mechanisms, thereby providing a foundation for more theoretically robust and context-sensitive future research.

The remainder of the paper is structured as follows. The next section outlines the research methods in detail. This is followed by an extensive review of the literature and its theoretical underpinnings. The subsequent section presents and discusses the key findings emerging from the analysis. Finally, the paper concludes by summarising the main insights and proposing avenues for future research.

2 | Materials and Methods

This study adopts a systematic literature review approach to advance understanding of relational capital and its influence on sustainability performance. Rather than providing a purely descriptive synthesis, the review is designed to critically evaluate and integrate existing evidence, with particular attention to the roles of knowledge sharing and innovation as underlying

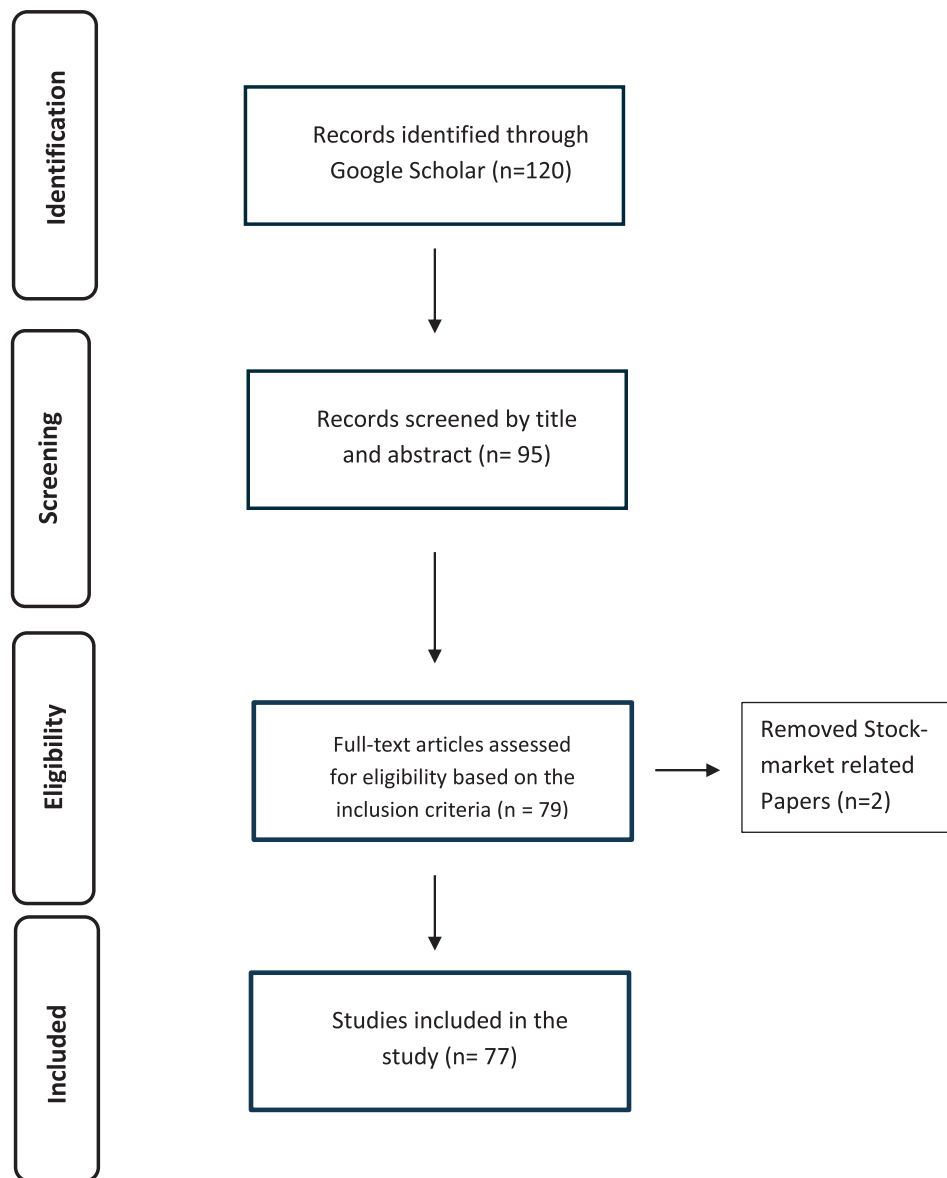


FIGURE 1 | Preferred reported items for systematic reviews for this paper.

mechanisms. Given the fragmented and context-dependent nature of prior research, a structured and transparent methodological approach is essential to ensure both rigour and reproducibility, especially in underexplored regions, such as the MENA region.

To guide the data collection process, this study follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework (Moher et al. 2015), which provides a robust protocol for identifying, screening and selecting relevant studies. The PRISMA procedure adopted in this research is illustrated in Figure 1. A comprehensive search was conducted using Google Scholar as the primary database, given its broad coverage of interdisciplinary academic sources. The search strategy was designed to capture the multidimensional nature of the research topic by incorporating a combination of keywords, including ‘relational capital*’ (relationship, relational), ‘knowledge sharing,’ ‘innovation,’ ‘environm*’ (environment

and environmental), as well as ‘economic,’ ‘social,’ and ‘sustainability’.

The selection process was carried out in multiple stages to ensure relevance and quality. Initially, studies were screened based on titles and abstracts, followed by a more detailed evaluation using predefined inclusion criteria. The review was restricted to peer-reviewed journal articles published in English between 2012 and 2022, balancing the need to capture recent developments with the need for sufficient coverage of the literature. This multi-stage filtering process enhances the reliability of the dataset while reducing the risk of selection bias.

To facilitate a more thorough analysis, the review is structured around the United Nations classification of countries by levels of development (United Nations 2021). Accordingly, the literature is categorised into three groups: developed countries,

developing countries and MENA countries. This classification enables a comparative perspective, allowing the study to examine how the role and impact of relational capital vary across different institutional and economic contexts. Importantly, while studies from developed and developing countries were limited to those published in journals ranked at least 2 stars in the Chartered ABS Journal Guide, this criterion was relaxed for MENA-focused research. Given the scarcity of high-ranking publications in this region, the inclusion of lower-ranking journals was necessary to ensure contextual completeness and avoid systematically excluding relevant evidence.

In total, the review includes 77 articles published across 39 academic journals. To maintain scholarly rigour, the majority of the selected studies (64 articles, 83%) were drawn from journals ranked at least 2 stars according to the ABS classification. The remaining 13 studies (17%), sourced from one-star or non-accredited journals, were included primarily to capture context-specific insights, particularly regarding the MENA region. The dataset is predominantly empirical, with 79% of studies relying on primary data and 21% employing secondary data analysis. This distribution reflects both the empirical richness of the field and the diversity of methodological approaches used to examine relational capital.

To provide a clearer picture of the studies included in the review, Tables 1 and 2 summarise where this research is being published and the quality of those outlets. As shown in Table 1, a large share of the studies appears in a relatively small group of journals, particularly *Journal of Intellectual Capital* and *Journal of Cleaner Production*, each contributing around 10% of the sample. This suggests that work on RC and sustainability is largely rooted in the intellectual capital and environmental management literatures. While this gives the field a solid foundation, it also hints at a certain degree of 'siloeing,' in which ideas circulate within familiar outlets rather than engaging more broadly. The very limited presence in top-tier general management journals, with only about 3% in outlets such as *Organisation Science*, raises questions about how visible and influential this research is in broader theoretical debates.

A similar pattern emerges in Table 2. On the one hand, it is reassuring that most studies (around 84%) are published in ABS-ranked journals, indicating a reasonable level of academic rigour. On the other hand, the bulk of this work appears in mid-tier journals (2* and 3*), with very few papers appearing in the highest-ranked outlets. This suggests that while the field is developing steadily and producing methodologically sound research, it has not yet fully entered the most influential scholarly conversations. One reason for this may be that much of the existing evidence is context-specific and sometimes fragmented, which can make it harder to develop broadly applicable theoretical contributions that top journals tend to prioritise.

It is also worth noting that about 13% of the studies come from journals not included in the ABS list, many of which focus on specific regions. Including these studies is valuable, as they bring in perspectives from underrepresented contexts, particularly from emerging economies such as the MENA region. However, they can also vary more in terms of research design and reporting

standards. This creates a small amount of a balancing act between capturing rich, context-specific insights and maintaining consistent quality. It reflects a wider issue in the literature: the evidence base is diverse but not always easy to integrate into a coherent whole.

Overall, the patterns in these tables point to a field that is growing and evolving but still somewhat fragmented. It has strong roots in particular domains, yet it has not fully connected with wider management scholarship. Moving forward, there is a clear need for research that bridges these gaps, work that is more theoretically integrated, methodologically robust and positioned to be published in higher-impact journals. This would help strengthen both the academic contribution and the practical relevance of RC in the context of sustainability.

3 | Literature Review and Theoretical Background

3.1 | Relational Capital, Innovation, Knowledge Sharing and Sustainability Performance in Developed Countries

Table 3 offers a detailed overview of the key features of the reviewed studies, including sample sizes, industry sectors and data types (primary or secondary). It reveals not only substantial methodological diversity but also a fragmented and uneven accumulation of knowledge on relational capital. This diversity is evident in both research designs and empirical settings, with studies spanning manufacturing (Villena Manzanares 2019), healthcare (Cavicchi and Vagnoni 2017), biotechnology (Tzabbar and Vestal 2015) and telecommunications (Obeidat et al. 2021). While the predominance of primary data (79%) enhances empirical richness and context-specific insights, it also contributes to fragmentation, as findings are often embedded in highly specific organisational contexts. Conversely, secondary data studies (21%) offer broader generalisability but may overlook the micro-level relational dynamics through which relational capital operates (Yeboah et al. 2026). This tension between contextual depth and generalisability raises important questions regarding the cumulative coherence of the literature.

A further imbalance emerges in the geographical distribution of studies, which are heavily concentrated in developed economies, particularly in Europe, as classified by the United Nations (UN 2021). This classification, based on economic criteria rather than regional delineations (UN 2020), underscores a structural bias in the literature towards institutional environments characterised by relatively stable governance frameworks and resource availability. Within these contexts, a dominant narrative has emerged, emphasising the complementary roles of knowledge sharing, innovation and relational capital in driving organisational performance (Maes and Sels 2014; Ben Arfi et al. 2018; Dias et al. 2020; Villena Manzanares 2019; Guerrero-Baena et al. 2015; Gerged et al. 2024). However, this convergence of findings may reflect not only theoretical consistency but also contextual homogeneity, raising concerns about the transferability of these insights to more institutionally complex settings.

TABLE 1 | Frequencies of journals along with their ABS ranking.

Name of the journal	Frequency	%Frequency	ABS ranking
<i>Organisation Science</i>	2	3%	4
<i>Technovation</i>	1	1%	3
<i>Technological Forecasting & Social Change</i>	2	3%	3
<i>Small Business Economics</i>	2	3%	3
<i>Production Planning & Control</i>	1	1%	3
<i>Journal of Business Research</i>	2	3%	3
<i>International Journal of Production Economics</i>	2	3%	3
<i>International Journal of Production Research</i>	1	1%	3
<i>Economics Letters</i>	1	1%	3
<i>Business Strategy and the Environment</i>	4	5%	3
<i>Decision Support Systems</i>	1	1%	3
<i>International Business Review</i>	3	4%	3
<i>International Journal of Contemporary Hospitality Management</i>	2	3%	3
<i>Journal of Small Business Management</i>	6	8%	3
<i>Journal of Sustainable Tourism</i>	1	1%	3
<i>Technology Analysis & Strategic Management</i>	1	1%	2
<i>Journal of Knowledge Management</i>	6	8%	2
<i>Journal of Intellectual Capital</i>	8	10%	2
<i>Journal of Cleaner Production</i>	8	10%	2
<i>Industrial Management and Data Systems</i>	1	1%	2
<i>Business Process Management Journal</i>	2	3%	2
<i>Computers in Human Behavior</i>	1	1%	2
<i>European Management Journal</i>	2	3%	2
<i>European Planning Studies</i>	1	1%	2
<i>International Journal of Innovation Management</i>	1	1%	2
<i>International Review of Entrepreneurship</i>	1	1%	2
<i>Expert Systems With Applications</i>	1	1%	2
<i>Corporate Social Responsibility and Environmental Management</i>	1	1%	1
<i>International Journal of Knowledge Management Studies</i>	1	1%	1
<i>Small Enterprise Research</i>	1	1%	1
<i>Asia Pacific Management Review</i>	2	3%	Not on the list
<i>Academy of Strategic Management Journal</i>	1	1%	Not on the list
<i>Electronic Interdisciplinary Miscellaneous Journal</i>	1	1%	Not on the list
<i>Independent Journal of Management & Production</i>	1	1%	Not on the list
<i>Indian Journal of Economics and Business</i>	1	1%	Not on the list
<i>International Journal on Emerging Technologies</i>	1	1%	Not on the list
<i>International Strategic Management Review</i>	1	1%	Not on the list
<i>Management Science Letters</i>	1	1%	Not on the list
<i>METU Studies in Development</i>	1	1%	Not on the list
Total	77	100%	

Indeed, the literature largely portrays relational capital as an unequivocally positive driver of sustainability outcomes. Empirical evidence suggests that it enhances financial sustainability in Spanish SMEs (Villena Manzanares 2019), reduces costs and fosters long-term partnerships in European and US firms (Elfenbein and Zenger 2014) and supports environmental and

social performance in Italian manufacturing contexts (Gualandris and Kalchschmidt 2016). Similar benefits are observed in healthcare organisations (Cavicchi and Vagnoni 2017) and universities (Paoloni et al. 2019). Nevertheless, while these findings collectively reinforce the value of relational capital, they also risk oversimplifying its role by underplaying potential contingencies

TABLE 2 | Frequencies ABS ranking journals used.

ABS ranking	Frequency	%Frequency
4	2	3%
3	29	38%
2	33	43%
1	3	4%
Not on the list	10	13%
Total	77.00	100%

and boundary conditions. In particular, the assumption that relational capital uniformly enhances sustainability may obscure important variations across sectors, institutional environments and firm capabilities.

This ambiguity becomes more apparent when examining the role of relational capital in strategic processes such as internationalisation. On the one hand, relational networks are shown to facilitate cross-border expansion by enabling access to external knowledge and opportunities (Vatamanescu et al. 2016; Catanzaro et al. 2019; Zahoor and Al-Tabbaa 2021). On the other hand, the effectiveness of these networks may depend on firms' ability to manage and leverage them, suggesting that relational capital is not inherently beneficial but contingent on organisational capabilities. A similar tension is evident amid economic uncertainty. While relational capital can enhance resilience and support firms during downturns (Henry 2013; Dumay 2013), its benefits may vary depending on the strength, structure and strategic use of these relationships.

At the organisational level, the relationship between relational capital, innovation and performance is equally complex. A substantial body of research links relational capital to enhanced innovation capacity and competitive advantage (Lasagni 2012; Agostini et al. 2017). However, this relationship is not linear. Overdependence on external relationships may expose firms to vulnerabilities, potentially undermining performance (Barrena-Martínez et al. 2020). Moreover, while network-based collaboration can facilitate knowledge exchange, it does not always translate into successful innovation outcomes (Terstriep and Lüthje 2018). Trust is frequently identified as a key enabling mechanism (Castelfranchi et al. 2006), yet its role is often assumed rather than critically examined. These inconsistencies suggest that the innovation benefits of relational capital are conditional rather than universal.

The interplay between relational capital and knowledge processes further complicates this picture. On the one hand, relational capital facilitates both technological and non-technological learning (Yoo et al. 2016) and supports knowledge creation through trust-based interactions (Keszei 2018; Kale et al. 2000). It also contributes to internal knowledge development and organisational performance (Jordão and Novas 2017), often through informal mechanisms embedded in everyday organisational practises (Coyte et al. 2012). On the other hand, the effectiveness of these processes appears to vary across institutional and market contexts (Andreeva and Garanina 2016), suggesting that relational capital alone is insufficient

to guarantee positive outcomes. Instead, its impact is likely mediated by broader organisational and environmental factors.

This complexity is further reflected in the role of innovation as a mediating mechanism. While innovation is widely recognised as a key driver of organisational performance (Walker et al. 2015), its effectiveness is shaped by external environmental conditions (Prajogo 2016). In particular, eco-innovation has been associated with improved financial performance (Alos-Simo et al. 2020), reinforcing the link between sustainability and competitiveness. However, the pathways through which relational capital contributes to such outcomes remain insufficiently specified, particularly regarding how knowledge flows are transformed into innovation capabilities.

Knowledge itself occupies a central yet under-theorised position within this literature. While both internal and external knowledge are recognised as critical for innovation (Hervas-Oliver et al. 2014), relational capital is often treated as a conduit rather than an active mechanism shaping knowledge dynamics. Empirical studies highlight its role in facilitating external knowledge sharing and green innovation (Ben Arfi et al. 2018), as well as the importance of information technologies in enabling knowledge processes (Curado et al. 2018). Furthermore, knowledge management practises, particularly when aligned with corporate social responsibility, are shown to mediate performance outcomes (Zaragoza-Sáez et al. 2020). However, the interaction between these elements remains insufficiently integrated within a coherent theoretical framework.

Importantly, the literature also reveals significant gaps and inconsistencies. For example, firms in certain contexts, such as Spain, continue to prioritise economic sustainability over social dimensions, despite evidence linking innovation to broader societal benefits (Cegarra-Navarro et al. 2016). Similarly, SMEs' innovation capacity is highly dependent on their responsiveness to external environmental changes and their internal capabilities (Soto-Acosta et al. 2018), further highlighting the contingent nature of relational capital's effects.

Although innovation is generally found to contribute positively to economic, environmental and social performance (Kuzma et al. 2020), existing research on SMEs remains disproportionately focused on eco-innovation, often neglecting the full scope of the triple bottom line (Klewitz and Hansen 2014). This narrow focus limits our understanding of how relational capital contributes to sustainability in a more holistic sense. Moreover, while external relationships are widely acknowledged as facilitators of innovation, the literature offers limited clarity on the conditions under which these relationships generate value.

Crucially, not all studies converge on the positive role of relational capital. González-Loureiro and Pita-Castelo (2012), for instance, challenge the assumption of a strong relationship between relational capital and innovation performance, calling for further empirical investigation. Such divergent findings point to a deeper theoretical ambiguity within the literature. Rather than representing a settled body of knowledge, research on relational capital appears characterised by competing assumptions, context-dependent effects and unresolved tensions.

TABLE 3 | Journals used, sample size, sectors and data types.

Author(s)	Sample size	Sector	Type of data
Villena Manzanares (2019)	180 firms	Manufacturing SMEs	Primary data
Cucculelli et al. (2019)	15,000	Manufacturing SMEs	Primary data
Elfenbein and Zenger (2014)	562 bundles—189 auctions, or competitive bid events (CBE)	A large, global diversified manufacturing company	Primary data
Gualandris and Kalchschmidt (2016)	77 firms	Manufacturing firms	Primary data
Cavicchi and Vagnoni (2017)	31 firms	Local health authorities and hospitals	Primary data
Corvino et al. (2019)	73 firms	Listed firms	Secondary data
Paoloni et al. (2019)	18 firms	Universities	
Catanzaro et al. (2019)	145 firms	SMEs	Primary data
Zahoor and Al-Tabbaa (2021)	394 firms	Manufacturing SMEs	Primary data
Henry (2013)	10 firms	SMEs	Primary data
Tzabbar and Vestal (2015)	678 scientific teams associated with 442 firms	Biotechnology sector	Secondary data
Lasagni (2012)	490	SMEs	Primary data
Agostini et al. (2017)	150	SMEs- high-tech B2B context	Primary data
Barrena-Martínez et al. (2020)	3744	3226 are SMEs (under 250 employees) and 653 are large firms	Secondary data
González-Loureiro and Pita-Castelo (2012)	140	Innovative SMEs	Secondary data
Terstriep and Lüthje (2018)	104	Two regional ICT clusters/SMEs	Primary data
Onofrei et al. (2020)	557	Manufacturing industry	Secondary data
Yoo et al. (2016)	120	Technology-based/innovative SMEs	Primary data
Keszei (2018)	158	Not specified	Primary data
Jordão and Novas (2017)	Paper reviews literature on KM, IC and network theories-No number	SMEs	Secondary data
Coyte et al. (2012)	13	SMEs	Primary data
Andreeva and Garanina (2016)	240	Manufacturing	Primary data
Walker et al. (2015)	44 empirical articles	Manufacturing, services or both	Secondary data
Prajogo (2016)	207	Manufacturing	Primary data
Alos-Simo et al. (2020)	2094 FIRMS	Five sectors (Telecommunications, R&D, Chemical, Trade and Food)	Secondary data
Hervas-Oliver et al. (2014)	2412	Manufacturing SMEs	Secondary data

(Continues)

TABLE 3 | (Continued)

Author(s)	Sample size	Sector	Type of data
Ben Arfi et al. (2018)	12 managers (2 interviewees in each company) 6 SMEs	Green industry sector, SMEs	Primary data
Curado et al. (2018)	367 SMEs	Innovative SMEs	Primary data
Zaragoza-Sáez et al. (2020)	120 hotels—3 stars or more	Hotel industry	Primary data
Maes and Sels (2014)	194	SMEs	Secondary data
Cegarra-Navarro et al. (2016)	133	Belong to the Social Environmental Agreement	Primary data
Soto-Acosta et al. (2018)	429	SMEs	Primary data
Kuzma et al. (2020)	15 PAPERS	Not specified	Secondary data
Klewitz and Hansen (2014)	84 key journal articles	SMEs	Secondary data
Yu and Huo (2019)	308 companies	Manufacturing	Primary data
Yu et al. (2021)	308 companies	Manufacturing	Primary data
Sambasivan et al. (2013)	260	Manufacturing	Primary data
Youn et al. (2013)	141	Majority manufacturing—but also Electronics and communication, Logistics and services and Miscellaneous	Primary data
Yusoff et al. (2019)	168	Manufacturing SMEs	Primary data
Ali et al. (2021)	235	Manufacturing SMEs	Primary data
Daou et al. (2014)	445	SMEs-textile, chemical, pharmaceutical and steel	Primary data
Liao (2018)	240	Manufacturing industry	Primary data
Sulistyo (2016)	150	SMEs	Primary data
Adomako and Nguyen (2020)	301	SMEs	Primary data
Oliveira et al. (2020)	351 Brazilian and 135 Portuguese	Micro and SMEs	Primary data
Yoo et al. (2016)	120	Technology-based SMEs	Primary data
Terry Kim et al. (2013)	486 surveys	14 top-tier five-star hotels	Primary data
Kim and Shim (2018)	199 surveys	SMEs	Primary data
Wee and Chua (2013)	21 Participants	4 SMEs	Primary data
Wang and Hu (2020)	236	Firms	Primary data
Lee and Wong (2015)	101 consultancy (service sector)	SMEs	Primary data
Massaro et al. (2016)	89 papers published in 10 journals	SMEs	Secondary data

(Continues)

TABLE 3 | (Continued)

Author(s)	Sample size	Sector	Type of data
Lin (2014)	119 SME senior managers	SMEs	Primary data
Yee-Loong Chong et al. (2014)	136	SMEs (manufacturing + service)	Primary data
Lee et al. (2016)	195 surveys	Manufacturing SMEs	Primary data
Kakoty (2018)	The Khasi sacred forest	Green-environment	Primary data + Secondary
Wang and Yang (2016)	277 knowledge workers	SMEs	Primary data
Yayla et al. (2018)	156	SMEs in the textile industry	Primary data
Yaseen et al. (2016)	Three companies—research sample was 199	Telecommunication	Primary data
Zahoor and Gerged (2021)	216	SMEs	Primary data
AlRubaishi and Robson (2019)	Family firms	Date industry	Primary data
Hayaeian et al. (2022)	170 owners/managers	SMEs	Primary data
Singh et al. (2020)	309	SMEs-manufacturing sector	Primary data
Delen et al. (2013)	738 responses from 277 SMEs	SMEs-service industry	Primary data
Horchani and Zouaoui (2021)	155	SMES-industrial sector	Primary data
Akhavan and Mahdi Hosseini (2016)	230 companies	R&D teams in advanced tech companies	Primary data
Adama and Nadif (2018)	112	SMEs Textile Industry	Primary data
Charbel et al. (2013)	39	All types of enterprises (family firms, non-family firms and listed companies in the Beirut Stock Exchange).	Primary data
Ateş et al. (2019)	14 buyer–supplier relationships in five large companies	Large buying firms in Turkey and their multiple suppliers at the dyadic level.	Primary data
Obeidat et al. (2021)	342	Three intensive-based technology—three telecommunication companies	Primary data
Obeidat et al. (2017)	498 employees	Three telecommunication companies	Primary data
Alshamsi et al. (2019)	393	Police/public	Primary data
AlQershi et al. (2021)	284	Manufacturing SMEs	Primary data
Bastian and Zali (2016)	11,823 respondents	Entrepreneurs	Secondary data
Al Saifi (2021)	172 employees	MSMEs	Primary data
Alshbili et al. (2021)	14	Oil and Gas industry	Primary data

These observations suggest that the current literature, while extensive, lacks a cohesive integration of theory and evidence. The prevailing tendency to treat relational capital as inherently beneficial obscures its contingent and context-specific nature. This calls for a more comprehensive understanding of the mechanisms through which relational capital influences sustainability outcomes, particularly in underexplored and institutionally complex contexts.

3.2 | Relational Capital, Innovation, Knowledge Sharing and Sustainability Performance in Developing Countries

The United Nations classifies developing countries as those characterised by comparatively lower levels of economic development than their developed counterparts (United Nations 2020). Given the numerical dominance of such economies globally, their role in shaping broader sustainability trajectories cannot be overlooked. However, despite their importance, the dynamics underpinning sustainability performance in these contexts remain insufficiently theorised and empirically fragmented. Existing studies nonetheless converge on the view that relational capital plays a significant role in enhancing sustainability outcomes across both large enterprises (Li et al. 2014; Zhang et al. 2017) and SMEs (Enrico Santarelli and Hien Thu Tran 2013; Kim and Shim 2018). However, this apparent consensus masks important variations in how relational capital operates across different institutional and organisational settings.

Empirical evidence from developing economies suggests that relational capital contributes to sustainability performance through multiple, and often indirect, mechanisms. In China, for instance, it enhances environmental and financial outcomes in manufacturing firms via supplier green management practices (Yu and Huo 2019; Yu et al. 2021), indicating that its effects are mediated through supply chain relationships rather than exerted directly. Similarly, in the Malaysian manufacturing sector, relational capital facilitates alliance formation (Sambasivan et al. 2013), while in Korea it contributes to improved environmental business performance (Youn et al. 2013). Beyond these contexts, relational capital has also been shown to underpin knowledge creation and incremental innovation in high-technology industries (Carmeli and Azeroual 2009). These findings suggest that relational capital functions less as a standalone resource and more as an enabling infrastructure through which firms access capabilities embedded in their networks.

This enabling role becomes particularly salient in the context of green and sustainability-oriented innovation. Studies of Pakistani and Malaysian SMEs highlight the positive influence of green relational capital on both environmental performance and innovation outcomes (Ali et al. 2021; Yusoff et al. 2019). At the same time, relational capital facilitates access to external resources, including financial support, as evidenced in Mexican SMEs (Daou et al. 2014), reinforcing its importance in resource-constrained environments. In Chinese manufacturing firms, its impact on environmental innovation is further strengthened when combined with ecological scanning capabilities (Liao 2018), suggesting that relational capital alone is insufficient unless complemented by firms' ability to interpret and

respond to environmental signals. These findings collectively point to a contingent and interaction-based view of relational capital, rather than a universally beneficial one.

A similar pattern of conditionality emerges in the relationship between relational capital, knowledge sharing and innovation. Empirical studies demonstrate that relational capital supports knowledge exchange and innovation in SMEs across various contexts, including Indonesia (Sulistyo 2016), Brazil and Paraguay (Oliveira et al. 2020) and Korea (Yoo et al. 2016). In particular, evidence from Korean tourism clusters suggests that relational capital enhances performance indirectly through its effect on knowledge sharing and subsequent innovation (Kim and Shim 2018). However, these findings also imply that relational capital does not directly generate performance outcomes; rather, its effects are mediated through intermediate processes such as knowledge flows and learning mechanisms. This raises important questions about the extent to which relational capital can be considered a primary driver of performance rather than a facilitating condition.

At the micro level, the effectiveness of relational capital appears to depend heavily on individual and organisational capabilities. The entrepreneur's knowledge, awareness and openness are critical in shaping knowledge-sharing behaviours within SMEs (Wee and Chua 2013), while internal organisational routines play a key role in enabling joint innovation and sustained performance (Wang and Hu 2020). Despite this, the literature on knowledge management in SMEs remains underdeveloped, largely due to the absence of standardised measurement frameworks and the limited number of empirical studies across different contexts (Massaro et al. 2016; Lee and Wong 2015). This lack of conceptual clarity further complicates attempts to isolate the specific contribution of relational capital.

Technological and institutional factors add a layer of complexity to this relationship. Information technology, when aligned with organisational capabilities, enhances knowledge management and responsiveness to market changes in SMEs (Lin 2014), while technological adoption in contexts such as Malaysia supports both e-business development and knowledge processes (Yee-Loong Chong et al. 2014). Moreover, investments in knowledge management and innovation capabilities contribute to the development of competitive advantage (Lee et al. 2016). At the same time, non-technological factors, such as traditional knowledge systems, also play a role in shaping sustainability outcomes, as illustrated by the influence of Buddhist economic principles on environmental sustainability (Kakoty 2018). These findings suggest that relational capital operates within a broader ecosystem of technological, cultural and institutional influences, rather than functioning in isolation.

Collectively, the literature underscores the importance of relational capital, innovation and knowledge management in shaping sustainability performance across developing economies. However, it also reveals a lack of theoretical consensus regarding the nature of these relationships. While some studies emphasise the direct impact of relational capital on sustainability, others highlight its indirect effects through innovation or knowledge-sharing mechanisms (Yusoff et al. 2019; Ali et al. 2021; Terry Kim et al. 2013; Kim and Shim 2018). This

divergence reflects deeper ambiguities concerning the role of relational capital—whether it should be conceptualised as a strategic resource, a relational capability or a contextual enabler.

These inconsistencies suggest that the current body of research remains theoretically under-integrated. Rather than converging towards a unified explanation, the literature presents a set of context-dependent and, at times, conflicting findings. This highlights the need for a more theoretically grounded understanding of how relational capital interacts with knowledge, innovation and institutional conditions to shape sustainability outcomes in developing economies.

3.3 | Relational Capital, Sustainability Innovation and Sustainability Performance in MENA Countries

The MENA region is commonly classified as part of the developing world based on economic indicators (Gerged 2018; United Nations 2021). However, such classification, while analytically convenient, risks obscuring the region's distinctive socio-cultural and institutional characteristics. Despite its growing economic and geopolitical importance, the MENA region remains under-represented in high-quality academic research, particularly in journals ranked 2 or higher in the Chartered ABS guide. This relative scarcity of rigorous empirical work suggests not only a gap in coverage but also a deeper limitation in how existing theories have been applied—or overlooked—in this context.

At a socio-cultural level, MENA countries exhibit a degree of homogeneity shaped by shared religious and cultural foundations. The region is predominantly Islamic, with Muslims accounting for approximately 94% of the population, alongside smaller Christian and Jewish communities (Hackett et al. 2025). These shared foundations influence societal norms and organisational behaviours, particularly through the interplay of individual responsibility and collective obligation. In Islamic contexts, individualism is framed in terms of accountability to family and society, while collectivism emphasises mutual support within communities (Musah 2011). Such cultural dynamics are likely to shape how relational capital is formed, maintained and leveraged, yet they remain insufficiently theorised in the existing literature (Gerged et al. 2022).

Beyond cultural influences, the institutional environment in MENA countries introduces additional layers of complexity. Political instability, exemplified by events such as the Arab Spring, has been shown to significantly affect firm behaviour, including exit decisions and sustainability performance, as observed in Turkish firms operating in Egypt (Yayla et al. 2018). More broadly, institutional conditions shape the formation and effectiveness of relational networks, influencing how entrepreneurs build connections and how these connections translate into performance outcomes (Bastian and Zali 2016). At the same time, regulatory and governance challenges—such as unclear reporting obligations and limited awareness of sustainability practises—constrain firms' ability to engage with social and environmental issues (Alshbili et al. 2021). These factors suggest that relational capital in the MENA context operates within a more volatile and less

predictable institutional framework than that typically observed in developed economies.

Within this environment, empirical studies provide mixed and context-dependent evidence regarding the role of relational capital. In some cases, relational capital is shown to directly enhance firm performance, as in Saudi firms where it is shaped by organisational culture (Attar 2018), or in Jordan, where it contributes to competitive advantage, moderated by demographic factors such as age and gender (Yaseen et al. 2016). In other contexts, its effects are more indirect. For instance, in UAE SMEs, relational capital facilitates the integration of environmental knowledge, thereby supporting sustainability outcomes (Zahoor and Gerged 2021). Similarly, in Iranian high-technology firms, it enhances knowledge sharing and innovation capabilities (Akhavan and Mahdi Hosseini 2016), while in Tunisian SMEs, it contributes to incremental innovation (Horchani and Zouaoui 2021). These variations suggest that relational capital does not operate through a single, uniform mechanism but rather through multiple pathways shaped by sectoral and institutional conditions.

The role of relational capital is further complicated by its interaction with social structures and organisational characteristics. In family-owned SMEs, for example, family commitments influence both the formation of relational capital and the type of innovation pursued (AlRubaishi and Robson 2019; Hayaeian et al. 2022). Similarly, relational capital linked to CEO networks and social ties has been found to affect firm performance in Moroccan and Lebanese contexts (Adama and Nadif 2018; Chabel et al. 2013). However, these benefits are not universally realised. SMEs in contexts such as Palestine continue to face structural constraints, particularly in accessing finance, which negatively impacts performance despite the presence of relational networks. This highlights a critical tension: while relational capital can provide access to resources, its effectiveness may be constrained by broader structural and institutional limitations.

Moreover, the relationship between relational capital and sustainability is often mediated by additional organisational and environmental factors. For example, in Turkish firms, relational capital mitigates the negative effects of supplier power on sustainability performance (Ateş et al. 2019), while environmental measurement systems and green innovation practises contribute directly to environmental outcomes (Singh et al. 2020). Similarly, knowledge-related factors, such as employment, human capital and generational dynamics, play a significant role in shaping both financial and non-financial performance in SMEs (Delen et al. 2013). These findings suggest that relational capital is embedded within a broader network of organisational capabilities and cannot be understood in isolation.

The interplay between relational capital, knowledge sharing and innovation is particularly prominent in the MENA context. Empirical evidence from Jordanian telecommunication firms indicates that relational capital enhances knowledge sharing and innovation, which, in turn, improve sustainable performance (Obeidat et al. 2017, 2021). However, the nature of this relationship remains contested. Some studies point to a direct effect of relational capital on innovation, while others emphasise indirect pathways mediated by knowledge-sharing processes (Alshamsi et al. 2019; AlQershi et al. 2021). This lack of consensus reflects

a broader ambiguity in the literature regarding the mechanisms through which relational capital influences organisational outcomes.

These findings highlight a fragmented and context-sensitive body of evidence. While relational capital is frequently identified as a key driver of performance, innovation and sustainability, its effects appear to be contingent on a range of cultural, institutional and organisational factors. Rather than converging towards a unified theoretical explanation, the literature presents a set of competing perspectives and inconsistent empirical results. This suggests that existing frameworks may be insufficient to fully capture the complexity of relational capital in the MENA context.

Accordingly, the relationship among relational capital, knowledge, innovation and sustainability performance in MENA countries remains contested and under-theorised, highlighting a significant research gap that warrants further investigation (AlQershi et al. 2021). Addressing this gap requires not only additional empirical evidence but also a more critical theoretical lens that can account for the region's unique socio-cultural and institutional dynamics.

4 | Discussion

A closer examination of journal rankings (Tables 1 and 2) suggests that the existing body of research on relational capital is largely grounded in publications from highly ranked journals, indicating a generally strong level of scholarly rigour. However, this apparent strength conceals a deeper structural imbalance. The dominance of studies originating from Europe and North America reveals a pronounced geographical concentration, raising concerns about the contextual generalisability of prevailing insights. In particular, the relative absence of high-quality studies from the MENA region highlights not only a gap in empirical coverage but also a broader limitation in the theorisation of relational capital across diverse institutional settings.

This imbalance is further compounded by sectoral concentration. As evidenced in Table 3, the literature has disproportionately focused on SMEs within manufacturing industries, leaving service sectors, especially in emerging economies, comparatively underexplored. This narrow empirical focus limits our understanding of how relational capital operates across different economic activities, in which relational dynamics, stakeholder configurations and knowledge processes may differ substantially. Consequently, existing findings may reflect sector-specific logics rather than generalisable patterns, underscoring the need for broader empirical and theoretical engagement.

More fundamentally, the literature on relational capital is characterised by unresolved theoretical tensions. While a dominant stream of research portrays relational capital as a key driver of organisational performance, innovation and sustainability, this assumption is increasingly contested. For instance, Andreeva and Garanina (2016) challenge the universality of this relationship, demonstrating that relational capital may have an insignificant effect on sustainability outcomes. Similarly, González-Loureiro and Pita-Castelo (2012) question its relevance for innovation, suggesting that its contribution may be more limited than commonly

assumed. These countervailing findings problematise the prevailing narrative and call into question the extent to which relational capital can be treated as an inherently beneficial organisational resource.

This lack of consensus becomes even more pronounced in the context of developing economies. Although empirical studies widely acknowledge the importance of relational capital (Yusoff et al. 2019; Ali et al. 2021; Terry Kim et al. 2013; Kim and Shim 2018), they diverge significantly in terms of how its effects are conceptualised. Some studies suggest a direct relationship between relational capital and innovation, while others position knowledge sharing as the primary mechanism through which relational capital influences performance. This divergence reflects a deeper ambiguity regarding the role of relational capital—whether it should be understood as a direct driver of outcomes or as an enabling condition that operates through intermediate processes. As highlighted by Massaro et al. (2016), the absence of consistent measurement frameworks further complicates efforts to reconcile these findings, thereby limiting the development of cumulative knowledge.

The challenges associated with theorising relational capital are most acute in the MENA context. Despite being a region characterised by unique institutional, cultural and economic conditions, it remains significantly underrepresented in the literature. The limited availability of empirical studies from accredited journals not only constrains evidence-based insights but also leaves managers and policymakers without clear guidance. More critically, the existing evidence is marked by substantial inconsistency. While some studies report a direct impact of relational capital on sustainability outcomes, others emphasise indirect effects mediated by knowledge sharing or innovation processes (Yaseen et al. 2016; Zahoor and Gerged 2021). In addition, contradictory findings regarding sustainability performance further complicate the picture (AlQershi et al. 2021).

These inconsistencies point to a fragmented and theoretically underdeveloped body of research. Rather than converging towards a unified explanation, the literature reflects a set of competing assumptions and context-dependent findings. This suggests that existing approaches may be overly simplistic, often failing to account for the complex interplay between relational capital, knowledge processes, innovation mechanisms and institutional conditions. Accordingly, future research should move beyond linear, one-dimensional models and adopt more integrative frameworks that incorporate multiple mediating and moderating mechanisms (Yaseen et al. 2016; Zahoor and Gerged 2021; AlQershi et al. 2021). Such an approach would enable a more comprehensive understanding of how relational capital shapes sustainability outcomes across diverse contexts, particularly in underexplored regions such as the MENA region.

5 | Conclusion and Recommendations for Future Study

The existing literature has consistently underscored the importance of relational capital, knowledge sharing, innovation and sustainability performance. However, this review demonstrates

that such relationships are far from uniform or universally applicable. Rather, the effects of relational capital appear contingent on the institutional environments in which firms operate and on the extent to which organisations can mobilise external relationships to access critical resources. In this regard, the findings of this study extend beyond descriptive synthesis and contribute to a more theoretically grounded understanding of relational capital.

Drawing on Institutional Theory, the review highlights how formal and informal institutional structures, such as regulatory frameworks, cultural norms and political stability, shape both the formation and effectiveness of relational capital. In contexts characterised by institutional voids or instability, particularly in developing and MENA countries, relational capital does not operate as a straightforward performance-enhancing asset but instead reflects adaptive responses to environmental uncertainty. Simultaneously, from a Resource Dependence Theory (RDT) perspective, relational capital emerges as a strategic mechanism through which firms manage dependencies, secure external resources and reduce uncertainty. However, its effectiveness is mediated by firms' capabilities to leverage these relationships and by the broader institutional constraints within which they are embedded.

The insights derived from this review (Tables 1–3) reinforce the need to reconsider relational capital not as a universally beneficial resource, but as a contextually embedded and strategically deployed capability. The dominance of studies conducted in developed economies raises concerns regarding the generalisability of existing theoretical assumptions, particularly when applied to institutionally complex environments such as the MENA region. Furthermore, the concentration of research within manufacturing and high-technology SMEs suggests that current knowledge may be shaped by sector-specific dynamics, limiting its broader applicability.

The analysis also reveals significant gaps within the MENA-focused literature. The scarcity of studies published in high-quality journals, coupled with methodological inconsistencies and a lack of standardised measures, constrains the development of cumulative knowledge. More importantly, the conflicting evidence regarding the direct and indirect effects of relational capital on sustainability highlights the need for more integrative and theoretically informed approaches. In particular, future research should move beyond linear models and incorporate multiple mediating mechanisms—such as knowledge sharing and innovation—while also accounting for moderating influences arising from institutional and organisational contexts.

This study advances the literature by repositioning relational capital within a multi-theoretical framework that integrates Institutional Theory and RDT. In doing so, it provides a more detailed explanation of how relational capital operates across diverse contexts, particularly in underexplored regions. Future research should build on this foundation by adopting longitudinal designs, mixed-method approaches and context-sensitive frameworks that capture the dynamic interplay between relational capital, institutional environments and sustainability outcomes.

6 | Managerial Implications

The findings of this study offer several important implications for managers and policymakers seeking to leverage relational capital to enhance sustainability performance.

First, managers should recognise that relational capital is not merely a passive network resource but a strategic capability that requires deliberate development and alignment with organisational objectives. Evidence suggests that fostering trust-based relationships, encouraging teamwork and promoting transparent communication can enhance knowledge sharing and improve organisational performance (Castelfranchi et al. 2006; Keszey 2018). In this regard, relational capital should be actively embedded within organisational processes rather than treated as an informal by-product of business interactions.

Second, given the resource constraints faced by SMEs, particularly in developing and MENA contexts, relational capital can serve as a critical mechanism for accessing external resources, knowledge and opportunities. Managers are therefore encouraged to invest in relationship-building activities, including partnerships, alliances and stakeholder engagement, even in environments characterised by limited financial capacity (González-Loureiro and Pita-Castelo 2012). At the same time, such investments should be strategically managed to avoid overdependence on external actors.

Third, the findings highlight the importance of aligning relational capital with innovation strategies. Firms that effectively integrate relational networks with research and development activities are better positioned to generate sustainable innovation outcomes. This suggests that managers should not only invest in R&D but also ensure that external relationships are leveraged to support knowledge acquisition and innovation processes.

From a policy perspective, the results underscore the critical role of the institutional environment in shaping the effectiveness of relational capital. Policymakers should prioritise developing stable regulatory frameworks and supportive ecosystems that facilitate collaboration among firms. Initiatives such as industry networks, innovation clusters and knowledge-sharing platforms can enhance relational capital at both firm and system levels (Lin and Lin 2016). Moreover, targeted government support has been shown to play a significant role in improving SME innovation and performance outcomes (Garone et al. 2015; Karhunen and Huovari 2015; Motta 2020; Romero-Jordán et al. 2014).

Political and institutional stability also remains critical. As evidenced in prior research, instability can significantly undermine firm performance (IMF 2011), suggesting that policymakers must address macro-level constraints alongside firm-level interventions. In regions such as MENA, where access to external stakeholders may be limited due to political and economic conditions (Shafi and Todman 2023), firms should proactively cultivate trust and transparency in their interactions with stakeholders. This is particularly important in light of increasing societal awareness of sustainability issues (Statista 2024). Finally, both managers and policymakers should adopt a context-sensitive approach to relational capital. Strategies that are effective in developed economies may not translate directly to developing or

institutionally complex environments. As such, relational capital initiatives should be tailored to local cultural, institutional and economic conditions to maximise their effectiveness.

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