



Systematic Review

Sustainability in Small and Medium-Sized Enterprises: A Systematic Literature Review and Future Research Agenda

Adelaide Martins ¹,* D, Manuel Castelo Branco ¹ D, Pedro Novo Melo ² D and Carolina Machado ³ D

- Faculty of Economics, University of Porto, Center for Economics and Finance (CEF-UP), 4200-464 Porto, Portugal; mcbranco@fep.up.pt
- School of Technical Short Cycles, Polytechnic Institute of Cávado and Ave, and Interdisciplinary Centre of Social Sciences (CICS.NOVA.UMinho), 4750-810 Barcelos, Portugal; pmelo@ipca.pt
- School of Economics and Management, University of Minho, and Interdisciplinary Centre of Social Sciences (CICS.NOVA.UMinho), 4710-057 Braga, Portugal; carolina@eeg.uminho.pt
- * Correspondence: afmartins@fep.up.pt

Abstract: Main aim: This paper examines the main topics of research in the literature studying the topic of sustainability in small and medium-sized enterprises (SME), and aims at presenting a future research agenda. Method: We conducted a systematic literature review based on articles published between 2000 and 2020. From an initial set of 88 papers taken from WoS in the period under analysis, 42 papers were effectively analyzed. Main results: The results of an in-depth reading reveal four clusters representing the main topics of research in the field: sustainability and SMEs' performance; green and environmental management issues; social and cultural issues and their impact on sustainability policies; values, skills, and capabilities. Key findings suggest that the following angles of research appear to be underexplored: theoretically grounded research; research using large samples; articles examining sustainability reporting; research looking into non-manufacturing sectors; work examining settings in developing countries; research undertaking international comparisons; articles exploring the complementarity between the literature on sustainability in SMEs and on family-owned businesses; and the influence of the social and cultural context on SMEs' engagement with sustainability. Main contribution: This paper offers insights to academia, practitioners, and policy makers to help SMEs engaging with sustainability and may assist also the latter to develop strategies to improve SMEs' social and environmental reporting. Given the current pandemic crisis, and the urgency for sustainable business practices, we expect to contribute to expanding knowledge in this field of research.

Keywords: small and medium-sized enterprises; sustainability; systematic literature review



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1. Introduction

Sustainability is an evolving field which, since the 1990s, has gained prominence in the mainstream of public consciousness [1] and has obtained considerable scholarly and political attention [2–4]. Issues about sustainable development have changed the corporate landscape [5,6] and emerged as key determinants of business success. Especially the largest companies adopt sustainability activities as part of their corporate strategy to obtain long-term benefits [7,8].

Debate on what constitutes sustainability has been intensive [9]. The United Nations (UN) Brundtland Commission defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" [10]. However, despite all the efforts in defining the term, a generally accepted definition in the literature does not exist [3,11,12]. Above all, it is a contextual concept in terms of its temporal and societal setting [13].

Notwithstanding these difficulties, some definitions of corporate sustainability have become influential. For example, Dyllick and Hockerts [14] (p. 131) defined it as "meeting

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the needs of a company's direct and indirect stakeholders (employees, clients, pressure groups, communities, etc.), without compromising its ability to meet the needs of future stakeholders as well." Sustainability is considered as not only addressing the needs of society but also as allowing the creation of enhanced value beyond the stakeholder's needs [15]. Companies are expected to generate value by way of producing the goods and services demanded by society while generating profits for their owners as well as welfare for society [16]. New market and social pressures are progressively ushering towards a transformation in the values of corporations' activities, as well as in their horizons [16], and organizations are expected to be "good citizen[s]" [17] (p. 325).

The sustainability agenda is an issue of a wider spectrum. In 2015, the United Nations (UN) General Assembly formally adopted the 2030 Agenda for Sustainable Development. In 2016, the EC published a framework for action "The European Consensus on Development" aligning the development policy of the European Union with the 2030 Agenda, in which "poverty eradication remains the primary objective of development policy" [18]. Under the new consensus, the sustainable development dimensions were linked to other policies, including peace and security, humanitarian aid, and migration. The impacts of COVID-19 on the global economy pose a serious threat to the realization of the UN Sustainable Development Goals by 2030. It represents an unprecedented external shock [19,20]. The UN stressed the need to undertake efforts to build more equal and inclusive post COVID-19 societies characterized by higher resilience in the face of the numerous challenges we face, such as pandemics and climate change, instead of going back to the world we knew before the pandemic [21].

Large companies are more visible and under pressure from their stakeholders and have long been the first to take up sustainability agendas [22,23]. Research has focused considerable attention on sustainability activities of large enterprises and multinational corporation firms [24–27] and their institutional and pan-national contexts [3]. Although the significant role of SMEs for both economies and social structures is acknowledged by wider political, academic, and professional communities, academic research on sustainability in SMEs is scant [3,28–33].

SMEs come in many different shapes and sizes [34]. They are an eclectic mix of firms, which present different challenges and opportunities in implementing sustainability-oriented actions [35]. The statistical definition of SMEs differs from country to country, reflecting the economic, cultural, and social habits of each one, and is most often based on the value of assets or the number of employees [22,36]. The EC defines SMEs as those that employ less than 250 persons and present a turnover below 50 million euros and/or a balance sheet total not exceeding 43 million euros [37]. Furthermore, the complexity of operational, financial, or governance relationships between companies makes it difficult to accurately draw the line between an SME and a larger company in the current business environment [34].

SMEs are likely to play a crucial role in the management of limited global social and environmental resources [22,38,39]. Being the main form of business and employment, SMEs are crucial actors for the construction of growth that is more inclusive and sustainable [40]. Seeking to jointly assess the quality of life and the development of the industry, Erdin and Ozkaya [41] are of the opinion that SMEs play a critical role for sustainable economic growth, contributing considerably to the economic development of the regions in which they are integrated. In the OECD area, they correspond to 99 percent of all businesses, generate around 60 percent of employment, and totalize between 50 and 60 percent of the value added [40]. They are the foundation of the European economy, reaching 99.8 percent of all employer firms, making up 65 percent of private sector employment and 54 percent of private sector gross output [42,43]. In the case of the manufacturing sector, most SMEs are labor-intensive industries, accounting for 58 percent of employment and 42 percent of value added [44,45]. Research also indicates that SMEs have a high environmental footprint [35].

SME businesses can address sustainable development-related concerns in communities and boost transformations on the road to sustainability [27]. As globalization and

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technology innovation diminish the significance of economies of scale in numerous activities, the likely contribution of smaller firms is strengthened [36]. However, involving the full range of SMEs to develop sustainable solutions for prospering in a dynamic competitive environment is a huge challenge [22,36]. Many barriers to SMEs sustainability management activities have been pointed out in the existing literature. The absence of an institutional environment, the absence of perceived business benefits deriving from sustainability practices, and the unavailability of framework and guidelines to support SME specifically in terms of planning, monitoring, and evaluating their business sustainability has been found across geographies [46–48].

It is known that the development of sustainable practices may be influenced by specific organizational traits [27]. The differences in terms of size between SMEs and large corporations are liable to bringing about divergences in respective economic, organizational, and behavioral characteristics [3,49]. SMEs possess specific characteristics that differentiate them from their larger counterparts [50]. They tend to be owner-managed and personalized, independent, multi-tasking, cash-limited, and based on personal relationships and informality, grouped in local systems of production, closely connected to their local community, and with limited access to financial resources [50–56]. SMEs are greatly dependent on individual manager's decisions contrary to large companies [30,57]. The differences regarding the owner lead to fundamental distinctions in managerial approaches to sustainability [58]. Research findings indicate that owner-managers play a significant role in micro-foundations of sustainability practices in SMEs, thus making them key individuals in the wider social and cultural settings [3,59].

The use of sustainability management tools and frameworks is poorly developed in most of the SMEs given that they are principally conceived for large companies and do not address the specific needs of SMEs [46]. Jenkins [24] (p. 241) argued that the implementation of sustainability-related practices in their business operations, such as it is understood for large companies, cannot merely be "scaled down to fit SMEs". Sustainability-related practices in most SME are informal, undertaken on an ad hoc and local basis and are not integrated within the core business strategy [58].

Recurring social and environmental crises have shed light on the harmful consequences of the traditional growth and profit-maximization model [60,61]. In particular, the COVID-19 pandemic has uncovered and accentuated some deep-rooted social issues, such as poverty and inequality [62]. Important research findings which cannot be disregarded suggest that a more sustainable business paradigm is required, and SMEs can play a crucial role in the transformation of modern markets and advance social and environmental well-being [27,63].

Briefly summarizing what has been observed up to this point, the contribution of business to the pursuance of sustainable development is indispensable, but, despite the critical role played by SMEs in this endeavor, research on sustainability in this type of organizations is relatively scant. What is more, sustainability-related instruments for SMEs are poorly developed because of the focus of both academics and practitioners on large firms. To begin changing such a state of affairs, an in-depth examination of the current state of research and the provision of a future research agenda are necessary.

Our aim is to provide a systematic literature review (SLR) on sustainability in SMEs. Existing literature reviews on SMEs' sustainability focus on identifying the main barriers and drivers of such sustainability [51], factors influencing sustainability performance [46], and on how sustainability relates to financial performance [29]. We aim at contributing to the existing knowledge on this emerging topic by offering a more encompassing analysis, allowing us to present a much-needed depiction of research on SMEs' sustainability. Our main research questions pertain to what the major themes in such research areas are and what the future research trends may be. We intend to make several contributions to the existing literature by identifying trends and themes standing out in the SMEs sustainability literature, as well as gaps and limitations, and providing important avenues for future research. Based on the main research results, one can highlight that the major contribution

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of this paper is that it offers insights to academia, practitioners, and policy makers to help SMEs engaging with sustainability, at the same time that it also may assist the latter ones to develop strategies to improve SMEs' social and environmental reporting.

The rest of this document is structured as follows. Section 2 addresses the methodology for conducting the literature review process and the rationality behind it. Section 3 provides a summary of the main results. The next section provides an overall discussion. Finally, Section 5 presents the concluding remarks.

2. Methodology

The purpose of a SLR is to provide "an overview of the status of existing knowledge and an insight into its development" [64] (p. 1397) (see also [65]), based on available bibliographic databases [66]. Comparing with traditional literature reviews, a SLR increases the transparency of the literature review process, by helping to minimize subjectivity in the studies' selection and allowing for a structured (or systematic) literature identification and selection [67]. Understood as a systematic review method that collects and analyzes studies based on research questions, Pattanasak et al. [68] are of the opinion that the use of SLR ensures that the literature review is carried out systematically. In the same line of thought, Tahir et al. [69] also share the opinion that SLR is a research method used to systematically develop a literature review, following well-defined steps, which essentially go through three phases, namely planning, conducting, and reporting. Bearing in mind that sustainability in SMEs is an emerging topic, we believe that the best approach to deliver an assessment of the status quo in the existing literature and set an agenda for future research is through a SLR, supported by a bibliometric analysis.

Grounded on the guidelines proposed by Fisch and Block [70] and Moher et al. [71], we take the following steps: (a) identify and clarify key concepts in the literature; (b) describe the research questions; (c) identify key factors related to research questions; (d) identify the relevant literature; (e) identify relevant data to answer research questions; (f) specify study results.

The articles are gathered from the Thomson Reuters Web of Science core collection database (WoS), insofar as it is widely used in bibliometric studies and SLR (e.g., [72,73]), and includes highly reputable journals. Our research focuses only on peer-reviewed articles published in English language in journals with WoS impact factor from 2000 to June 2020. Chapters, books, and conference papers were not considered. It is important to highlight that, although the Scopus database has greater coverage in terms of indexing journals in various areas of knowledge, including the social sciences, the level of demand and rigor in journals' indexation placed by WoS assumes greater relevance, the reason why we chose this database (e.g., [29,74]).

It is from the 1980s onwards, during the World Conferences on Environmental Education, that the issue of sustainability and the need for its promotion in an organizational context are most proclaimed. In this context, and in order to better understand the importance that sustainability in SMEs has been assuming in the present century, a period in which these issues assume more accentuated contours, the time period underlying the present study takes place between the year 2000 (year of turning century) and the present.

During the review of the literature, a set of keywords were identified that were used in the SLR and search protocol. We define SME by using similar terms, based on other organizations' studies (e.g., [75–77]), such as "small firms", "small companies", "small businesses", "small and medium enterprises", and "small and medium-sized enterprises". Based on these keywords, we used the following general search string: "sustainability" AND "SME" OR "small firms" OR "small and medium-sized enterprises" OR "small and medium enterprises" OR "small businesses" OR "small companies". A total of 90 publications were identified using the Web of Science search engine.

After the initial collection of articles, the criteria to include and exclude publications were applied. According to Kuckertz and Block [67], selection inclusion and exclusion criteria depend on the aims of research, based on aspects concerning content, method,

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or publication quality. For a comprehensive selection of papers, we used the following inclusion and exclusion criteria:

- Inclusion criteria:
 - O Peer-reviewed papers published from 2000 to June 2020;
 - O Research papers in English;
 - Research papers published in journals with journal impact factor;
 - O Theoretical, qualitative, or quantitative papers.
- Exclusion criteria:
 - Peer-reviewed papers published after June 2020;
 - O Peer-reviewed books, chapters, conference papers or working papers;
 - Research papers published in journals without WoS impact factor;
 - O Research papers unrelated to the SLR topic;
 - Research papers published in journals included in the Emerging Sources Citation Index.

The selection process is described in Figure 1.

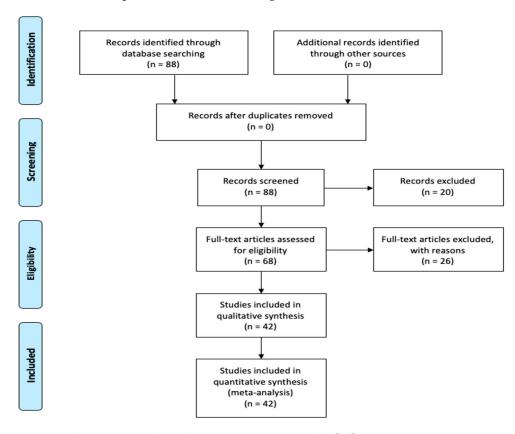


Figure 1. Selection process based on PRISMA statement (see [71]).

First, as mentioned above, 88 papers published between 2000 and June 2020 were identified through database searching. Second, an abstract analysis of all papers kept was performed independently by each researcher. Articles not related to the topic, duplicates or with other exclusion criteria (such as chapters, books, conference papers, papers published in journals without impact factor or articles in other languages than English) were classified for removal. A joint analysis was made and any divergences discussed until consensus was reached. At the end of the selection process, 46 publications were removed, and 42 articles published between 2000 and June 2020 were kept (see Supplementary Materials).

We performed a cluster analysis (e.g., [78]) to allow us to define the main research lines of sustainability in SMEs. A cluster represents "a stream of research or a particular topic" [29] (p. 1299). According to Ketchen and Shook [78], the first issue in clusters

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analysis is choosing clustering variables that will be relevant for defining the research topics. We conducted a first in-depth reading of sample papers to identify authors, paper characteristics and purpose, theoretical framework, paper type/research method, and organization type. While reading each paper, we selected relevant text and marked it with keywords. We selected the key variables used to define clusters based on Table 1 and descriptive statistics, such as number of publications per year, journal-wise distribution, authors with more publications, and number of publications per geographical spread. To ensure that clusters were well defined, we conducted a second in-depth analysis of each paper, helping to reduce possible biases. At the end of the process, four clusters emerged.

Table 1. Content of the selected articles.

A 41	Paper C	haracteristics	Pagagrah Purmaga(a)	Theoretical	Paper Type/Method	Oznania dian Tana	
Authors —	Year	Country	Research Purpose(s)	Framework		Organization Type	
Chege and Wang [22]	2020	Kenya	To examine the role of technology innovation on SME performance through environmental sustainability practices.	Contingency theory	Research paper/semi-structured questionnaires	Agribusiness firms	
Knight et al. [52]	2019	Australia	To explore the role of firm resources for environmental behavior and disclosure and the role of management attitudes and norms in moderating this relationship.	Resource-based view	Research paper/ questionnaire	Wine industry	
Kornilaki and Font [79]	2019	Greece	To explore how socio-cultural and industrial norms influence the intentions and behaviors towards sustainability of owner-managers.	influence the intentions and behaviors towards —-		Tourism industry	
Kornilaki et al. [30]	2019	Greece	To understand the factors that influence owner-managers' evaluations and judgments of self-efficacy to act more sustainably.		Research paper/unstructured interviews	Tourism industry	
Kraus et al. [3]	2020	Germany	To identify the antecedents and factors which drive SME owner-manager behavior in relation to sustainability and regional/local economic dynamics.		Research paper/semi-structured interviews	Manufacturing firms	
Mani et al. [9]	2020	India	To explore the different supply chain social sustainability practices, and to investigate how SMEs supply chain social sustainability practices might relate to supply chain performance.	Stakeholder resource-based view	Research paper/semi-structured interviews and structured questionnaires	Manufacturing firms	
Roxas et al. [80]	2017	Philippines			Research paper/questionnaires and interviews	Manufacturing firms	
Panwar et al. [81]	2015	United States of America (USA)	To examine the effects of a decline in SMEs' financial resources on its ongoing sustainability initiatives.		Research paper/questionnaires	Manufacturing firms	
Roxas and Coetzer [82]	2012	Philippines	To examine how firm's institutional environment influences its proclivity to adopt a proactive orientation toward environmental sustainability.	Institutional theory	Research paper/questionnaires	Food-processing sector	

Table 1. Cont.

Audhan	Paper C	haracteristics	Possaveh Purmoso(s)	Theoretical	Damou Truno/Moth od	Organization Type
Authors —	Year	Country	Research Purpose(s)	Framework	Paper Type/Method	Organization Type
Loucks et al. [31]	2010		To explore how to meaningfully engage SMEs in strategies that improve the social and environmental sustainability of their businesses.	Stakeholder theory	Conceptual paper	SME sector in general
Imran et al. [83]	2019	Pakistan	To examine how information accessibility and resource availability affect the sustainability of SMEs through the mediation and moderating role of innovation capability and management commitment, respectively.	Natural resource-based view	Research paper/questionnaires	SME sector in general
Caputo et al. [84]	2018	Italy	To identify the relationships between firms' sustainability actions and the economic performance of SMEs.	Consumer culture theory	Research paper/structured questionnaire and interviews	Service, Industry, Manufacturing, Transport, others
Choudhary et al. [85]	2019	United Kingdom (UK)	To measure both operational efficiency and environmental performance of the production system by using the green integrated value stream mapping, and to identify improvement opportunities for minimizing lean and green wastes.		Research paper/case study with focus group	Packaging- manufacturing SME
Upstill-Goddard et al. [47]	2016	UK	To examine how capacity for learning can affect the success of implementing sustainability standards.		Research paper/case studies with semi-structured interviews, participatory meetings, and observation	Construction product manufacturing firms
Hofmann et al. [86]	2012	USA	To explore the influence of the adoption of advanced technology, collaboration experience with suppliers and customers, and innovative capacity on firms' ability to implement environmental management practices and environmental collaboration. Dynamic capabilities perspective		Research paper/interviews and structured questionnaire	Manufacturing firms
Tilley and Fuller [87]	2000		To report on the analysis underpinning research exploring the relationship between SMEs and sustainability using fore sighting methods.		Conceptual paper	SME sector in general

 Table 1. Cont.

A 41	Paper C	haracteristics	Research Purpose(s)	Theoretical	Dansar Tara /Matha i	Owner in the True
Authors —	Year	Country	Research Furpose(s)	Framework	Paper Type/Method	Organization Type
Shihadeh et al. [88]	2019	Palestine	To examine the influence of banks' credit to SMEs on non-performing loans.		Research paper	SME sector in general
Klewitz [89]	2017	Germany	To explore how the interaction between SMEs and their knowledge network can condition their strategic orientation for sustainability-oriented innovations.		Research paper/case studies with questionnaire, interviews, participatory observation	SME sector in general
Redmond et al. [90]	2016	Australia	To show how the relationship between discontinuities, SME owner-manager's habits, and organisational routines and readiness may influence environmental practices.		Conceptual paper with interview-based application	SME sector in general
Yus Kelana et al. [91]	2015		To explore whether the approach of sustainability practices in the Gollan model can address human resource issues without affecting short-term and long-term profitability of the organization.		Conceptual paper	SME sector in general
Dey, Malesios, De, Budhwar et al. [92]	2020	UK	To explore how circular economy fields of action are related to sustainability performance; to identify the issues, challenges, and opportunities of adopting a circular economy; to identify key strategies, resources, and competences that facilitate effective implementation of a circular economy.		Research paper/case studies with questionnaire, interviews, and focus group	Manufacturing firms
Quartey and Oguntoye [93]	2020	South Africa; Kenya; Uganda; Ghana.	To explore the key determinants of intermediary performance in promoting corporate sustainability in SMEs. Organisational performance theory		Research paper/interviews	SME sector in general
Bakos et al. [51]	2020		To investigate the trends in drivers and barriers of sustainability adoption and to inform both SMEs managers and policymakers.		Literature review	SME sector in general

Table 1. Cont.

A 4	Paper Ch	naracteristics	Pagagarah Pramaga(a)	Theoretical	Dan au Tara /Matha d	One or institute There
Authors —	Year	Country	Research Purpose(s)	Framework	Paper Type/Method	Organization Type
Dey, Malesios, De, Chowdhury et al. [94]	2020	UK	To explore how lean management practices, sustainability-oriented innovation, corporate social responsibility practices, sustainability and economic performance are correlated.	Complementarity theory	Research paper/questionnaires and interviews	Manufacturing firms
Bartolacci et al. [29]	2020		To present a comprehensive knowledge map of the intellectual structure of the field of study of sustainability and financial performances in SMEs.	_	Literature review	SME sector in general
Westman et al. [27]	2019	Canada	To examine the underlying drivers of sustainability-oriented actions of SMEs.	Social actor framework	Research paper/questionnaires and semi structured interviews	SME sector in general
Dey et al. [95]	2019	UK	To examine the effect of sustainability practices, lean practices, and process innovation on sustainability performance, and the mediating effect of lean practices and process innovation separately between sustainability practices and performance.		Research paper/questionnaires and interviews	Manufacturing firms
Chang and Cheng [96]	2019	Taiwan	To develop an integrated multi-attribute decision analysis model to evaluate the sustainability development of SMEs.	Grey relational theory and rough set theory	Research paper/ questionnaires	Manufacturing firms
Malesios et al. [97]	2018	UK; France; India	To assess the relationship between the sustainability and the financial performance of SMEs in economic development.		Research paper/questionnaires and interviews	Manufacturing/ processing firms
Schmidt et al. [98]	2018	Brazil	To analyze the performance of SMEs aiming to identify the main practices of sustainability.		Research paper/case study with questionnaires and interviews	Manufacturing firms
Boso et al. [99]	2017	Nigeria	To explore how financial resource slack drives sustainability expenditure under varying conditions of market pressure and political connectedness in a developing-economy market.	Stakeholder theory and slack resource theory	Research paper/interviews	SME sector in general

 Table 1. Cont.

A dl	Paper C	haracteristics	Research Purpose(s)	Theoretical	Paper Type/Method	O managination Town
Authors —	Year	Country	Research Furpose(s)	Framework		Organization Type
Witjes et al. [100]	2017	Netherlands	To understand how SMEs integrate corporate sustainability into their business activities.	_	Research paper/case studies	SME sector in general
Viesi et al. [101]	2017	Austria; Czech Republic; Hungary; Italy; Slovenia	To assess SMEs eco-energy performance, and future and innovation perspectives.	_	Research paper/questionnaires	SME sector in general
Johnson [102]	2017	Germany	To investigate the ability of sustainability-oriented SMEs to acquire and develop explicit knowledge required for an environmental management system and related tools. Absorptive cap framework and related tools.		Research paper/observations and semi-structured interviews	SME sector in general
Jansson et al. [103]	2017	Sweden	To examine the relationships between market orientation and entrepreneurial orientation, in relation to sustainability commitment, sustainability practices and management values in SMEs.		Research paper/questionnaires	SME sector in general
Choi and Lee [104]	2017	South Korea	To propose a framework for integration and management of sustainability factors and their application for SMEs.	_	Research paper/Case studies	Manufacturing firms
Tomšič et al. [105]	2015	Slovenia	To analyze the link between corporate sustainability and economic performance.		Research paper/questionnaires	SME sector in general
Johnson [106]	2015	Germany	To compare the rates of awareness and implementation of multiple sustainability management tools in SMEs and examine managerial and organisational characteristics that can influence the rates of adoption.	Innovation diffusion model	Research paper/questionnaires	SME sector in general
Williams and Schaefer [107]	2013	UK	To explore the motivations of managers of environmentally pro-active SMEs to engage with environmental issues, focusing particularly on the climate change agenda.	_	Research paper/interviews	SME sector in general

 Table 1. Cont.

A (1	Paper Cl	naracteristics	- Research Purpose(s)	Theoretical	Panar Type/Mathad	Organization Type
Authors —	Year	Country	Research 1 urpose(s)	Framework	Paper Type/Method	Organization Type
Moore and Manring [38]	2009		To analyze the SME sustainability advantages in contrast to MNEs and to study different scenarios for SMEs to optimize sustainability.		Conceptual paper	SME sector in general
Broccardo and Zicari [108]	2020	Italy	To explore the role of sustainability in the business models of SMEs.		Research paper/questionnaires	Wine sector
Kiefhaber et al. [109]	2020	New Zealand	To investigate which identities are critical for SMEs engagement in sustainability and how these identities interrelate with their institutional environment.	Identity theory and organisational institutionalism	Research paper/interviews	Hospitality businesses

3. Results

Regarding the content of all articles selected based on the review protocol explained in Figure 1, a table is presented with the papers' specific content based on categories as mentioned in the previous section: authors' names, publication year and country context, theoretical framework, paper type/research methods, industry setting, and aim of the study (Table 1).

Next, based on the descriptive statistics analysis, we provide some results according to various categories, such as number of publications per year, journal-wide distribution, publications per geographical spread, publications per authors, and clusters based on SLR.

Figure 2 shows that out of the 42 studies, 76 percent were published between 2016 and 2020. In the period 2000–2015, the interest in the topic was not significant (only 10 papers were published). These data show that the topic Sustainability in SMEs has assumed more importance and relevance in WoS-indexed journals in the last 5 years. During the period 2000–2020, the topic attracted increasing scholarly interest among researchers, as can be observed in Figure 2 presenting the distribution of 42 sustainability articles across time.

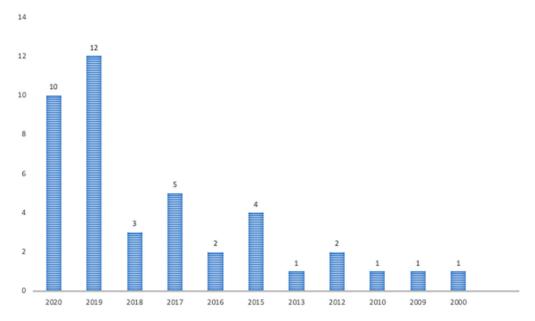


Figure 2. Number of publications per year.

According to the journal-wise distribution, the theme has appeared in a wide variety of journals, becoming popular among researchers of diverse fields. It was found that only 4 journals published more than one article on sustainability in SMEs, i.e., Business Strategy and the Environment, Journal of Business Ethics, Journal of Cleaner Production, and Sustainability. As can be seen in Table 2, 21 different journals published only 1 article and all journals have a WoS impact factor in 2020.

Table 3 below presents a list of authors with more publications. As can be observed, Prasanta Kumar Dey and Chrisovalantis Malesios lead the list with 4 papers and Fouad Ben Abdelaziz, Soumyadeb Chowdhury, and Debashree De are next with 3 papers. The papers of the authors with more publications cover the following topics: sustainability performance, green and environmental management practices, social and cultural issues, and values, skills and capabilities in sustainability.

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Table 2. Journal-wise distribution.

Journal Title	IF (2019)	IF (2020)	#
Business Strategy and The Environment	5.483	10.302	11
Journal of Cleaner Production	7.246	9.297	6
Journal of Business Ethics	4.141	6.43	2
Sustainability	2.576	3.251	2
Organization & Environment	3.333	6.116	1
Journal of Sustainable Tourism	3.986	7.968	1
Journal of Small Business Management	3.120	4.544	1
Journal of Environmental Management	5.647	6.789	1
Journal of Business Research	4.874	7.55	1
Technology in Society	2.414	4.192	1
Production Planning & Control	3.340	7.044	1
Processes	2.753	2.847	1
Advanced Science Letters		1.253	1
Australasian Journal of Environmental Management	1.196	1.833	1
British Journal of Management	2.750	6.567	1
Futures	2.769	3.073	1
Innovation—The European Journal of Social Science Research	1.055	1.867	1
International Journal of Production Economics	5.134	7.885	1
International Journal of Computer Integrated Manufacturing	2.090	3.205	1
Economic Research—Ekonomska Istrazivanja	2.229	3.034	1
Corporate Social Responsibility and Environmental Management	4.542	8.741	1
Energy Policy	5.042	6.142	1
Entrepreneurship and Regional Development	2.928	5.149	1
Engineering Construction and Architectural Management	2.160	3.531	1
Sustainability Accounting Management and Policy Journal		3.354	1

Table 3. Authors with more publications.

Authors –	Art	icles
Authors	N°	%
Dey P.K.	4	9.52
Malesios, C.	4	9.52
Abdelaziz, B.F.	3	7.14
Chowdhury, S.	3	7.14
De, D.	3	7.14
Roxas, B.	2	4.76
Font, X.	2	4.76
Johnson, M.P.	2	4.76
Kornilaki, M.	2	4.76
Other authors	17	40.48

The analysis of the publications by geographic context, based on Table 1, reveals that the country with most publications is UK with 7 publications, followed by Germany with 4 publications, and Italy with 3 publications.

Further, studies were classified into developing or developed countries, following the World Economic Situation Prospects 2020 [110]. It was found that, of the 36 empirical papers, one paper examines both developed and developing countries [97] and another examines the case of Taiwan. Of the other 34 papers, 74 percent of the publications examine developed countries (e.g., Australia, Austria, Canada, Greece, Czech Republic, France, Germany, Hungary, Italy, Netherlands, New Zealand, and Sweden) and the remaining 26 percent examine developing countries (e.g., Brazil, Ghana, India, Kenya, Nigeria, Pakistan, Palestine, Philippines, and South Africa). A sizeable proportion of the publications examine European countries, with 53 percent of the research papers. In turn, Oceania is the least represented region with only 8 percent of publications. Based on the results presented,

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4 clusters were defined. As shown in Table 4, the clusters are interconnected, in line with Bartolacci et al.'s [29] research. Cluster construction was based on the results, specifically on information given in Table 1. We used the article purpose and keywords connected to them. The four clusters are: sustainability and SMEs' performance (cluster 1), green and environmental management issues in SMEs (cluster 2), social and cultural issues in SMEs and their impact on sustainability policies (cluster 3); and values, skills, and capabilities needed for sustainability in SMEs (cluster 4).

Table 4. Clusters based on SLR.

Clusters	No of Papers	References
Sustainability and SMEs' Performance	21	Bartolacci et al. [29] Boso et al. [99] Broccardo and Zicari [108] Caputo et al. [84] Chang and Cheng [96] Chege and Wang [22] Choudhary et al. [85] Dey et al. [95] Dey, Malesios, De, Budhwar et al. [92] Dey, Malesios, De, Chowdhury et al. [94] Yus Kelana et al. [91] Knight et al. [52] Malesios et al. [97] Mani et al. [9] Panwar et al. [81] Quartey and Oguntoye [93] Roxas et al. [80] Schmidt et al. [98] Shihadeh et al. [88] Tomšič et al. [105] Viesi et al. [101]
Green and environmental management issues in SMEs	19	Bakos et al. [51] Chang and Cheng [96] Chege and Wang [22] Choudhary et al. [85] Dey et al. [95] Dey, Malesios, De, Budhwar et al. [92] Dey, Malesios, De, Chowdhury et al. [94] Hofmann et al. [86] Johnson [102] Knight et al. [52] Loucks et al. [31] Redmond et al. [90] Roxas and Coetzer [82] Roxas et al. [80] Schmidt et al. [98] Tilley and Fuller [87] Viesi et al. [101] Westman et al. [27] Williams and Schaefer [107]
Social and cultural issues in SMEs and their impact on sustainability policies	3	Kornilaki and Font [79] Kraus et al. [3] Westman et al. [27]

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Table 4. Cont.

Clusters	No of Papers	References
Values, skills, and capabilities needed for sustainability in SMEs	21	Bakos et al. [51] Caputo et al. [84] Choi and Lee [104] Hofmann et al. [86] Imran et al. [83] Jansson et al. [103] Johnson [102] Kiefhaber et al. [109] Klewitz [89] Knight et al. [52] Kornilaki and Font [79] Kornilaki et al. [30] Moore and Manring [38] Panwar et al. [81] Redmond et al. [90] Roxas and Coetzer [82] Schmidt et al. [98] Upstill-Goddard et al. [47] Westman et al. [27] Williams and Schaefer [107]

4. Discussion

Our research revealed 4 clusters. Cluster 1 includes 21 papers that analyzed the relationship between sustainable practices and SMEs performance. Cluster 2 is composed of 19 papers encompassing green and environmental issues. This theme/cluster covers topics, such as lean and green management practices and barriers and drivers to environmental management. Cluster 3 includes only 3 papers, which are devoted to the examination of social and cultural issues in SMEs and their impact on sustainability policies. The last cluster comprises 21 papers examining the values, skills, and capabilities needed for sustainability in SMEs.

Of the 42 papers that met the inclusion criteria, 7 are conceptual papers [31,38,87,90,91] or literature reviews [29,51]. The conceptual papers are older, albeit relatively recent, which is evidence that the body of knowledge on SMEs' sustainability is still being consolidated. The literature reviews being very recent (both from 2020) also attest to the underdeveloped character of this research field. With the exception of Bartolacci et al.'s [29] study, these papers focus on "green and environmental management issues in SMEs" (cluster 2) or/and "values, skills, and capabilities needed for sustainability in SMEs" (cluster 4) and most of them seem to adopt a business case for sustainability in SMEs' perspective. Moore and Manring's [38] conceptual paper focuses on the business case for SMEs' engagement with sustainability, exploring different strategies: becoming an interesting sustainable investment option for acquisition by larger firms; creating networks of SMEs engaged with sustainability; becoming sustainable suppliers in global supply chains. Loucks et al. [31], included in cluster 2, is another good example, by exploring how to engage SMEs in strategies that advance the sustainability of their businesses, while generating economic value. Drawing on concepts from stakeholder theory, the authors argue that most benefits which could ensue to SMEs that make the concerted effort to identify the best strategies will occur with regards to stakeholders and business practices. The menaces from advocacy groups, government regulations pertaining to pollution or production practices, expensive production changes, and the absence of information concerning marketplace changes are pointed out as likely business risks/challenges for SMEs that engage in the management of sustainable practices.

Findings gathered from the SLR reveal that studies were conducted across different geographical locations, both in a developing-economies setting and in developed institutional

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environments. This notwithstanding, most studies examine SMEs in developed European countries. The UK (with 7 studies) and Germany (with 4 studies) are the countries standing out, but Greece and Italy (with 2 and 3 studies, respectively) also deserve mentioning. Only 2 studies examine SMEs from the US [81,86]. This is surprising in view of the greater contribution of this country to greenhouse gases and environmental degradation when compared to the other countries [51]. Commenting on their findings concerning the corresponding author's country, which we have not analyzed, Bartolacci et al. [29] expressed their surprise regarding the USA and UK not appearing in the top two countries. Even more surprising, for the same reason, is the absence of China as a setting for the studies we are examining. These findings were also corroborated by Bakos et al. [51], who provided a literature review on the drivers and barriers of environmental sustainability in SMEs.

In addition, based on our analysis, few studies offer comparisons between countries. Viesi et al. [101] offered an examination of energy efficiency and sustainability performance of about 500 SMEs of Austria, the Czech Republic, Hungary, Italy and Slovenia. Malesios et al. [97] examined the impacts of individual sustainability-related practices and performance dimensions on SMEs' economic performance, using a sample of 119 British, French, and Indian SMEs. However, these researchers did not provide details concerning how firms from these countries compare in terms of sustainability performance. Although, based on interviews to 32 experts from National Cleaner Production Centres in Kenya, Uganda, South Africa, and Ghana, Quartey and Oguntoye's [93] study does not really amount to a comparative study.

Furthermore, a significant number of the studies refer to the SME sector in general, rather than one industry specifically. The analysis reveals that empirical studies were conducted across different types of industries, ranging from the wine industry [52,108] to the tourism industry [30,79]. However, most research is found in the manufacturing sector setting. In particular, more than half of the articles included in clusters 1 and 2 target the manufacturing SMEs (e.g., [9,80,81,85,92,94–98]). This is understandable, given that manufacturing is an energy-intensive sector, whose processes contribute to increasing the fossil-carbon footprint, and problematic and unethical labor practices were found.

The manufacturing sector has markedly contributed to the economic growth of many countries and adds force to an inclusive and sustainable development [111]. Overall, the relationship between sustainability-related manufacturing practices and organizations' performance has received limited attention [7]. This evidence is reinforced in the case of SMEs, as suggested in the articles included in cluster 1 (e.g., [80,95–97]).

Furthermore, there are contradictory and inconclusive results of the scarce literature studying the association between economic performance and sustainability-related practices and performance of the SMEs [97]. In the context of British, French, and Indian SMEs, Malesios et al. [97] examined the relationship between individual sustainability practices and performance dimensions with financial performance. The findings suggest that only specific practices and performances focused on environmental, operational, and social sustainability appear to benefit SMEs' economic performance (e.g., health and safety practices were found to positively impact turnover, while the corresponding aspects of performance were found to be nonsignificant or even negative). One other study suggests that an entrepreneurial strategic orientation allows small businesses in the Philippine manufacturing industry context to develop more proactive stances towards environmental sustainability practices, which ushers to better firm performance [80]. Mani et al. [9] confirmed a positive association between social sustainability-related practices and supply chain performance that is mediated by customer, supplier, and operational performance. Bartolacci et al. [29] performed a SLR to present a broad understanding of the relationship that exists between sustainability and financial performances in SMEs and concluded that most studies confirm a positive association between sustainability-related and SMEs' financial performance and competitiveness. Our results are in line with Bartolacci et al.'s [29] findings, but we emphasize that this issue deserves a more in-depth understanding.

The theoretical frameworks applied range from contingency theory to stakeholder theory and the resource-based view; however, from our SLR it can be ascertained that other theories have been used as well. Such theoretical diversity may be due to the multidisciplinary nature of sustainability research, which is dependent upon shared knowledge from numerous different disciplines [112]. However, more revealing of the emerging nature of this research area is the high proportion of studies positing descriptive insights not supported by an explicit theoretical framework. There is a clear need to further more research with theoretical contributions.

Our methodology analysis revealed that questionnaires, interviews, focus groups, mixed methods, SLR, conceptual reviews, and case studies were present in the dataset. Yet, there is a predominance of the case study approach and very small data samples. Research-oriented case studies are very valuable to deal with situations of uncertainty and uniqueness within the SME complex context. Research using archival data or/and large samples is scant, and there is a lack of replication studies. We recognize the difficulty in obtaining reliable SME data in some countries' institutional settings. One explanation for the lack of accounting and management replication studies might be that the academic environment often considers repetition an "inferior" form of research [113] (p. 218). However, regarding sustainability in SMEs, successful replication may also contribute to further and deeper explanatory studies and theory, and larger samples may increase robustness of findings.

Reviewing the literature shows a relative predominance of qualitative contributions. Cluster 4 includes most of the quantitative papers that use relatively large samples (e.g., [81-83,86,103]). Grounded on a dynamic capabilities framework and using a sample of 294 SMEs from the US, Hofmann et al. [86] sought to identify capabilities that assist in the engagement with environmental practices. They showed that the collaboration with suppliers and customers, the adoption of advanced technology, and existence of an innovative ability may equip firms with capabilities that are helpful in addressing environmental challenges. Drawing on a quantitative approach using a questionnaire to 450 Swedish SMEs, Jansson et al. [103] examined the relationships between commitment to sustainability and market orientation, entrepreneurial orientation, and management values. Their findings reveal that market orientation, entrepreneurial orientation, and sustainability practices are associated with commitment to sustainability, but management is not. Roxas and Coetzer [82] based their analysis on a survey by questionnaire to 166 small manufacturing firms in the Philippines to explore the institutional environment's influence on the attitudes regarding the natural environment and on environmental sustainability. Theoretically, the authors support findings that owner-manager attitudes are strongly shaped by the institutional environment and that such attitudes influence the environmental sustainability orientation. However, the study offers empirical evidence that lack of resources in small firms does not appear to be a major barrier towards environmental sustainability. This is not in line with the view that small firms are generally unable to pursue actions to sustainability-orientated activities relative to the larger ones (e.g., [51,55]).

Cluster 2 presents an extended set of papers addressing the increasing demand for the adoption of sustainability-related practices through lean and green policies (e.g., [85,92,94,95]). There is burgeoning interest in establishing links between lean management practices and environmental sustainability [95]. Although lean practices are philosophically efficiency-oriented, practices, such as eco-design, renewable energy use, and social wellbeing, are perceived as capital intensive by SMEs and many of them are generally not as able to develop environmental management practices as their larger counterparts [92]. Another vast array of papers deals with the barriers to green and environmental management and the drivers for change assisting the transformation of SMEs into more sustainable businesses (e.g., [31,51,90,92,95,96,101,107]). A stream of research suggests that most SMEs appeared to be driven by competitiveness concerns and external pressure, more than by environmental concerns [51]. For example, based on a qualitative study of pro-environmental engagement of small businesses in the UK, Williams and Schaefer [107] analyzed the motivations of environmentally pro-active small businesses'

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managers to adopt pro-environmental measures. The requirement of compliance with environmental legislation, benefits from resource efficiency savings, win-win arguments, together with perceived longer-term benefits of investment that would lead to better public relations were found as motivations for SME managers to become environmentally pro-active. However, contradicting explanations as to why SMEs pursue management environmental practices have been offered [27]. For example, Knight et al. [52] highlighted that financial resources are not central to the implementation of environmental strategies in SMEs, which contradicts the literature sustaining that their limited access is a barrier to a successful engagement in sustainable practices (e.g., [55,56]).

Another important stream of research highlights environmental collaboration as part of a systematic approach that facilitates the adoption of environmental practices (e.g., 22, 86,92,101,102). Johnson [102], for example, delivered evidence that sustainability orientation can be incorporated by SMEs through the environmental knowledge associated to the level of experience and capability, in both strategic and operational aspects. The findings validate that cooperation with customers can impact a firm's proactive sustainability engagement. Other scholars, Dey, Malesios, De, Budhwar, Chowdhury et al. [92] derived strategies for achieving sustainability across the whole circular economy field of action in SMEs. It was found that specific strategies include collaboration with suppliers and customers across the supply chain. However, the study by Hofmann et al. [86] on SMEs manufacturers from the USA suggested that the majority of the firms do not adopt forms of collaboration or adopt them only to a slight degree. This area would benefit from further research, as multi-tier suppliers are usually SMEs, and recent literature suggests that diverse intermediaries facilitate sustainability action and the guidance of sustainability transitions in society in different ways [48].

Few articles draw attention to the family business nature of most SMEs (e.g., [108,109]). Broccardo and Zicari [108] made an explicit connection between SMEs-related literature and family business research, by exploring how wine sector SMEs operating in Italy integrate sustainability into their business models. The results emphasized differences in performance between family firms and their non-family counterparts: the business model of family businesses is conducive to superior performance, in particular economic performance. Two distinct types of business models for SMEs, based on their type of governance, family or non-family, were proposed by the authors. In turn, Kiefhaber et al. [109] interviewed owner-managers and managing directors of hospitality in New Zealand and examined the role of such actors' identities concerning their engagement with sustainability and their relationship with the institutional environment. The findings validate interesting results: there is no single sustainability-related identity, and family and community institutional orders act as important enablers and facilitators of sustainability-related identities, whereas institutional orders of market, state, and profession have both enabling and constraining roles.

Another interesting finding is the almost absence of research on sustainability reporting in SMEs. Only the study by Knight et al. [52], included in three clusters, explicitly examined such reporting, focusing on environmental disclosure in the Australian wine industry setting. On the basis of a survey by questionnaire and grounded on the resource-based view, the authors examined the impact of different firm resources on environmental behavior and disclosure, and found that innovation performance significantly influenced the disclosure of such behavior.

Still another noteworthy absence of research pertains to how social and environmental sustainability relate to intellectual capital management in the case of SMEs. Although several of the studies reviewed examine the values, skills, and capabilities needed for sustainability in SMEs, none establishes relationships between these aspects and intellectual capital. The only relevant mention to intellectual capital is made by Loucks et al. [31] (p. 188), who considered that the "importance of intellectual capital to achieving and sustaining competitive advantage may be especially salient for small firms".

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Cluster 3 includes only 3 papers [3,27,79]. All publications are recent and present empirical studies with data gathered from interviews, questionnaires or both. Westman et al. [27] explored the responses of over 1600 Canadian SMEs to a survey, complementing empirical data with 37 semi-structured interviews. The authors specified that individual beliefs and values of owners and managers represent a key factor regarding the engagement with sustainability. These results do not support the previous literature arguing that management attitudes or values impact commitment to sustainability (e.g., [59,107]). The results of Westman et al. [27] also reveal the importance of the well-being of employees in sustainability engagement and of the socioenvironmental context in which SMEs are immersed. Following a grounded theory approach, and using data obtained from interviews, Kornilaki and Font [79] explored how external factors, namely sociocultural and industrial ones, influenced decision-making in small tourism enterprises in Greece. Kraus et al. [3] undertook an inductive investigation to analyze regional/geographic and behavioral cultural antecedents of sustainability in manufacturing SMEs in the German region of Baden-Württemberg, based on semi-structured interviews. The findings revealed point of views predominantly informed "by a particular moral identity connected with a perspective rooted in regionally bound, longstanding and 'expected' behaviors of trust, fairness, honesty and community responsibility" (p. 629). On the whole, the literature in this field shows that the exploration of the influence of the social and cultural context on SMEs engagement with sustainability is poorly developed.

5. Concluding Remarks

Our findings reveal four clusters that represent the main themes of research in the literature focusing on sustainability in SMEs: sustainability and SMEs' performance; green and environmental management issues; social and cultural issues and their impact on sustainability policies; values, skills, and capabilities. The topic was received with increased interest in WoS-indexed journals from 2016 onwards, with a sizeable proportion of the publications examining developed countries, in particular the European ones. The results point to the important role that external factors and internal factors play in influencing SMEs to take on sustainability-oriented initiatives and work toward sustainability goals (e.g., [27,52,79,86,102]). Overall, our findings suggest that research on SMEs sustainability has received limited attention. We have also provided evidence on the main limitations and gaps, identifying opportunities for future research. Evidence of this underdeveloped field of research ranges from the recentness of the existing literature reviews to the lack of critical research. This notwithstanding, we will focus on gaps and avenues for further research which may have opened up due to the lack of attention to germane strands of research, as well as to issues pertaining to theoretical frameworks, sample size, country and sector setting, and almost absent topics of research. Some of the issues that are evident from the underdevelopment of the literature mentioned above and that we deem deserving of further reflection, pertain to lack of interchange between the literatures on SMEs' sustainability and family-firms' sustainability; the high proportion of studies not using an explicit theoretical framework; the scarcity of studies using large samples; the relative scarcity of research on developing countries and making comparisons between countries; the focus on the manufacturing sector; and the scant research on sustainability reporting in SMEs.

One of the aspects we consider under-researched and put forward as one of the most fruitful lines of research is the exploration of the complementarity between the literature on SMEs' sustainability and on family business. We believe that this cross-fertilization makes sense given that a sizeable proportion of family firms are SMEs, and vice versa, but we also consider that adding to the arsenal of theoretical frameworks within the socio-emotional wealth theory (SEWT) would contribute significantly to extending knowledge in the field. SEWT originates in behavioral theory, and was specifically developed to address issues regarding family firms, constituting the main theoretical framework in family business research [65,114–116]. SEW is defined as the "non-financial aspects of the firm that meet the family's affective needs, such as identity, the ability to exercise family influence, and

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the perpetuation of the family dynasty" [115] (p. 106). We believe this is an interesting lens of analysis in particular concerning the investigation of the influence of the social and cultural context on why and how SMEs engage with sustainability.

Another aspect that we deem a fruitful line of research concerns the relationships between intellectual capital and its management and sustainability in SMEs. The absence of research on how social and environmental sustainability relates to intellectual capital in the case of SMEs noted above is likely to be associated with the limited attention that both research on SMEs sustainability and on intellectual capital in SMEs have received. Demartini and Beretta [117] depicted the latter type of research as being fragmented, but also considered its relevance to be growing. These researchers emphasized the crucial role played by intellectual capital in the case of SMEs given that they "have less tangible resources available compared to their larger counterparts and, thus, rely more on intangible resources" [117] (p. 317). Recent research has developed intellectual capital management methods in the context of SMEs [118]. We believe that endeavors such as this focusing on sustainability management methods would amount to a line of research with considerable practical impacts.

Research using large samples and providing empirical quantitative studies is scant. On the other hand, such research focuses on individual countries, and particularly on the more developed ones. There is no study on China, and empirical analysis on SMEs of countries, such as Brazil, India and South Africa, are clearly neglected. However, these countries include some of the richest biodiversity areas in the world and some of the major settings of environmental degradation are in these countries. Thus, it is also worthwhile to better understand how SMEs are engaged with nature and what type of support SMEs should be provided with to make them part of the solution to prevent biodiversity loss and extinction. Furthermore, we consider that further comparative international studies, including comparisons between developing and developed countries, are essential for extending further knowledge of SMEs' sustainability. Given the scarcity of databases and the time-consuming nature of data collection concerning SMEs, we put forward that a fruitful strategy would be to organize teams of international researchers collecting similar data from SMEs in different countries and conducting comparative research.

There is no evidence of a stream of research on SMEs' sustainability reporting. Such lack of research is consistent with the findings of literature reviews on sustainability reporting. When examining firm size as a reporting determinant, Dienes et al. [119] referred to the lower reporting levels of SMEs, but did not identify research focusing on this type of firms. Chung and Cho [120] (p. 229) indicated research on sustainability reporting in SMEs as one of the opportunities "for positive growth" in social and environmental accounting research. We share the view expressed by the authors and see SMEs' sustainability reporting research as one of the most fruitful avenues for further development in research.

This study contributes to the literature on SMEs' sustainability by providing a SLR that allowed us to identify several issues that are underexplored or lacking, and putting forward several contributions on how to further develop such literature. Additional research on SMEs' sustainability is crucial in view of their importance in the management of finite global environmental and social resources and in advancing the targets of sustainable development.

Our analysis offers insights to academia, practitioners, and policy makers to help SMEs in their endeavors to engage with sustainability-related practices. We have identified a number of limitations and opportunities for further research that may assist management scholars in their research. However, it also has some relevant practical implications. We consider that Universities and Business Schools should promote research on SMEs' sustainability to help SMEs to be an active contributor to sustainable development in view of the lack of resources they usually have to engage with sustainability practices. Given the recent trends regarding sustainability reporting standardization and harmonization, namely in the European Union, this study may be of assistance for policy makers by making them aware that research on such reporting in the SMEs context is almost inexistent and

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reminding them that such research is crucial to support their proposals. Our findings may assist them to develop strategies to improve SMEs' social and environmental reporting. This review emphasizes also the social implications of understanding social and cultural contexts, and specific sectors in which SMEs operate, to align incentives and other strategic tools in promoting a balance between social, economic, and environmental sustainability in SMEs' development.

This study has several limitations. Firstly, the choice of the search keywords may have led to the exclusion of publications examining specific aspects of corporate sustainability (such as the fight against corruption, responsible tax behavior, or even biodiversity) without explicitly relating them to the wider issue of sustainability. Further research could extend the analysis to provide insights on such specific topics, which is desirable to enrich the literature. Secondly, we selected only WoS papers, potentially excluding insights on sustainability in SMEs offered in papers presented at conferences, books, and book chapters, but also in journals indexed in other databases. Thirdly, we have examined articles published in English. We recognize that manuscripts written in other languages (e.g., French or Portuguese) and published in academic journals could be an important addition to the literature. Future research could examine literature published in other languages. Fourthly, our sample consists of articles published between 2000 and 2020. Future studies could replicate this study in a post-COVID period and analyze whether this unprecedent disruptive event has boosted interest in research on sustainability in SMEs.

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