

## International Journal of Sustainable Development and Planning

Vol. 18, No. 5, May, 2023, pp. 1625-1637

Journal homepage: http://iieta.org/journals/ijsdp

# A Study on Strategic Entrepreneurship Orientations: Indicators, Differential Pathways, and Multiple Business Sustainability Outcomes



Muath Maqbool Albhirat<sup>®</sup>, Siti Nur 'Atikah Zulkiffli<sup>®</sup>, Hayatul Safrah Salleh<sup>®</sup>, Nur Amalina Mohamad Zaki<sup>®</sup>

Faculty of Business, Economics and Social Development, Universiti Malaysia Terengganu, Terengganu 21030, Malaysia

Corresponding Author Email: atikahzulkiffli@umt.edu.my

https://doi.org/10.18280/ijsdp.180534

Received: 4 December 2022 Accepted: 18 April 2023

#### **Keywords:**

strategic entrepreneurship orientations, sustainability supply chain management, sustainable business performance, Jordanian SMEs

## **ABSTRACT**

Awareness of strategic entrepreneurial orientations (SEO) has grown in sustainability research in small and medium-sized businesses (SMEs), and the extant literature includes review studies concerning SEO. Despite the existence of these studies, in the Jordanian context, more research is needed about a parsimonious model that includes the underlying mechanisms linking SEO to multiple sustainability performances. Given such a gap, this study proposes an updated conceptual model of SEO using the Resource-Based View theory (RBV) and Social Capital Theory (SCT) as the theoretical underpinnings. Specifically, this research links SEO to Jordanian SMEs sustainability performance, like economic, environmental, and social practices, through the mediating roles of sustainable supply chain management (SSCM). In addition, a relevant literature search highlights three indicators of SEO: innovativeness, risktaking, and proactiveness. This reviewed conceptual framework was created through a process of qualitative analysis including a synthesis of the literature, analysis, and integration with existing models. A conceptual model has an essential role in the scientific processes. Its purpose is to aggregate evidence, help in understanding phenomena, inform future studies and act as a reference operational index in practical settings. The study also creates avenues for future research and provides theoretical contributions.

## 1. INTRODUCTION

Entrepreneurship is the only way to preserve competitiveness and ensure development in today's rapidly changing world. For an organization to succeed amidst those complexes and accelerate economic and environmental degradation concerns, adopting SEO remains the best option to maintain growth and a sustainable competitive advantage. However, environmental deterioration presents huge issues for humanity, its economies, and the environment [1]. Further, governments and corporations are focusing on more manufacturing practices sustainable and integrating sustainable processes into core corporate operations as a result of increased concern over environmental challenges [2]. Environmental, social, and economic challenges have also highlighted the importance of SMEs. In order to create jobs, produce commodities with value-added, and promote innovation in local economies, SMEs are essential [3]. SMEs are so generally seen as the basis of the economy. However, SMEs usually account for more than 60% to 70% of industrial pollution due to their abundance and disregard for environmental protection [4]. Jordan has had significant environmental problems, such as water contamination, energy waste, and air pollution [5].

Jordan Enterprise Development Corporation (JEDCO) [6] asserted that SMEs account for over 60% of all employees and produce about 40% of the nation's Gross Domestic Product (GDP). As a result, SMEs are supported in their attempts to develop environmentally friendly manufacturing processes since Jordan has developed a strategic plan to reform the

economy and encourage entrepreneurship. Additionally, a recent report on the Jordan Response Plan (JRP) emphasized the significance of innovation and sustainability in various SMEs industrial sectors for improved food security in the future in order to meet the needs of the present generation without jeopardizing the ability to meet those of future generations [7]. Likewise, in order to help SMEs, improve their sustainability outcomes, the Jordanian government provided SMEs with instructions to force them to adopt stainability approaches [8].

Furthermore, academics suggestions and policymakers indicated that SSCM is a critical strategy for SMEs to reduce pollution while preserving competitiveness [9]. In this regard, sustainable business performance (SBP) has become key for any nation to efficiently utilize its limited resources in achieving maximum economic growth. Sustainable economic growth is crucial to be maintained over the long term without negatively impacting society, the economy, and the environment for future generations. However, organizations must adopt SEO to survive today's cutthroat economic environment [10]. The fusion of business and strategy highlights prospects for solicitation-related actions and benefits [11]. Opportunities in the future can be taken advantage of to add more excellent value [10]. SEO uses innovations to fight poverty by integrating the production of unique goods that meet sustainability requirements with the needs of underemployed or underperforming individuals or groups [12]. It primarily provides individuals and institutions with financial and information services. It satisfies the requirement to deliver goods corresponding to sustainability criteria to help them escape economic hardship through selfemployment and entrepreneurship [13]. Consequently, they can promote economic, social, and environmental sustainability [5].

Supply Chain (SC) partners seek sustainable competitive advantages at the inter-SC level; therefore, they must consider the vital roles of SEO and SSCM in determining SMEs sustainability outcomes. This is because the inter-SC competition replaced the inter-company competition to achieve a competitive advantage over their counterparts; hence, SC participants must work together and function as a single coherent entity [14]. Notably, SSCM offers businesses a potential competitive advantage [15]. It refers to the coordination of enterprises along the SC and management of the information, material, and capital flows while taking into account the objectives of the environmental, economic, and social elements of sustainable development, which are derived from stakeholder and customer demands [14].

Despite the value of the organization's capabilities in achieving SBP, most firms are reluctant to share information, especially sustainability information, with SC partners to enhance the organization's ability to sustain their performance [14]. Manatsa and McLaren [16] indicate that poor information exchange refers to the fear of "an unequal distribution of risks, costs, and benefits among the partners" and "the risk of it being divulged to competitors or used for opportunistic bargaining." The scope of collaborative and strategic SC management actions is hampered by such anxiety. This argument indicates the necessity to adopt SEO through innovativeness, risk-taking, and proactiveness in the process of sharing information with the SC partners to ensure SBP.

In short, the literature generally supports the notion that SEO can connect with organizational sustainability, but SEO alone does not represent the necessary factors to engage in sustainability. Because it counts on social context, entrepreneurship is a socioeconomic activity, entrepreneurs are also the production of their social environment, wherefore, the social or relational factors appear to play an important role in SC information sharing, and social embeddedness further allows firms to foster mutual learning, knowledge exchange, and resource sharing, enabling SC partners to build adequate capabilities to improve their sustainability performance [17]. Therefore, the benefits and relevance of social relations lend strong support for this study to examine the necessity of information-sharing practice from the perspective of SCT for entrepreneurial firms to sustain their performance [18]. In addition to this, there is a lack of literature on the underlying mechanism that can explain the SEO pathway toward SMEs sustainability success [19]. Hence, it is strongly needed to conceptualize SMEs sustainability performance through multiple strategic orientations and SSCM practices to identify potential elements that can play a significant role in the enhancement of sustainability outcomes, especially from the perspective of a developing country like Jordan.

RBV and SCT theories would help to better understand how SEO is connected to SSCM and SBP among Jordanian SMEs. The potential impact of organizational capabilities and SSCM on SBP serves as its driving force. This claim is compatible with Barney's claim that RBV should be taken into account in the context of SC management because it provides the theoretical framework for researching elements like SEO and SSCM. The RBV has been utilized by previous researchers to study SEO [11] and SSCM [20] in the context of SMEs. To be

more precise, Gavronski et al. [21] propose a conceptual framework for developing abilities in green supply management while utilizing RBV. By speculating on the relationships between SEO, SSCM, and Jordanian SMEs sustainability performance, this study adds to the ongoing discussion. Similarly, SCT views an entrepreneurial organization's relationships as important resources to achieve various advantages, including information access, data exchange, and the coordination of sustainability efforts [22]. Hence, by using the SSCM as a mediator, SEO encourages SMEs to be involved in sustainability practices [14].

In this study, the authors conducted a traditional narrative review (non-systematic review) about entrepreneurship orientations, SMEs, and sustainability literature. Even though the systematic review has its strengths by being more explicit and structured in the selection of the research [23], the topics of entrepreneurship orientations and sustainability, however, have been widely investigated in several fields such as global administration, business. business regional studies, entrepreneurial economical, and institutional economics in which systematic methodology becomes limited to specific keywords and academic journals [24]. As a result, a nonsystematic review will better enhance our understanding of the subjects of interest for this study.

Besides, the number of works dedicated to the association SEO-sustainability has provided viewpoints. For example, Asadi et al. [12] revealed that SEO may not essentially lead to sustainability and firm growth. On contrary, Gupta and Batra [25] reveal that SEO leads to better SBP. The cause for the inconsistent perspectives is attributable to the fact that there is a missing association in the association between SEO-sustainability performance [26]. Thus, instead of proposing a simple direct effect of SEO on sustainability performance, this study intends to fill this gap and provide a significant contribution to the current body of knowledge, by proposing a new conceptual framework of SEO. Specifically, our study aims to identify the indicators of SEO for Jordanian SMEs. In general, it is asserted that offering SEO coupled with risktaking, innovativeness, and proactiveness can Jordanian SMEs in improving their sustainability [27]. Precisely, this study integrates SSCM practices as the mediating mechanism which can explain how SEO leads towards successful sustainability outcomes among SMEs. This is because the SEO-sustainability association may not be necessarily direct and thus can be explained efficiently via green firms' practices serving as a mechanism [28].

Our study proposes a conceptual framework for SEO in light of the foregoing arguments. Precisely, our study aims to identify the indicators of SEO for Jordanian SMEs. SSCM practices are the underlying mechanisms linking SEO to SMEs sustainability performance. The RBV and SCT were used as the theoretical underpinnings to identify essential factors and develop a related proposition, RBV and SCT would offer an adequate understanding of how SEO is linked to SSCM and SBP. Following the Triple Bottom Line (TBL) model, this study considers three essential aspects of sustainability, economic, social, environmental, to conceptualize SBP. Hence, a conceptual model is proposed based on an extensive literature review to address the following broader issue: what are the potential indicators and underlying mechanisms of SEO Jordanian SMEs to achieve an adequate level of sustainable business performance?

In the next section, we delineate briefly an overview of Jordanian SMEs. Subsequently, section three covers the conceptual model of SEO, and the evaluation of the literature that led to propositions based on the theoretical foundations of RBV and SCT as well as support from the pertinent literature. At last, the paper is concluded by discussing the conclusion, theoretical implications, contributions to business practice, and future research in the final section.

#### 2. OVERVIEW OF JORDANIAN SMES

Jordan is an upper-middle-income nation whose economic engine is virtually entirely comprised of SMEs. For instance, 95% of Jordan's business market was made up of SMEs in 2021 [29]. Moreover, SMEs account for nearly 95% of all registered businesses, contribute 50% or more to the GDP, and employ roughly 60% of the Jordanian labor force [30]. These are important signs of the significance of SMEs to the Jordanian economy and how essential it is for them to be included in any plan for economic and sustainable growth.

However, SMEs operate in a very volatile commercial climate, and this situation impacts the lives of their products or services produced. Therefore, despite its significant economic contribution, SMEs in Jordan must maintain their performance and improve their SEO. Hitt et al. [31] emphasized that SMEs must overcome obstacles to gain a sustained competitive edge. According to Al-Saa'da et al. [32] and Hattar [27], most researchers concur that Jordanian SMEs require awareness about the nature and importance of such challenges to succeed in a commercial environment. Accordingly, JEDCO [6] indicated that the Jordanian SMEs compared to the SMEs in developed countries revealed inadequate levels to adopt sustainability practices, which caused their lower level of mismatch in economic, environmental, and social frameworks.

Jordanian SMEs are generally categorized based on the number of employees and the definition; small businesses have 19 or fewer employees, and medium businesses have 20–99 employees [6]. SMEs make up 98% of companies operating in Jordan, creating more than 35% of employment and 45% of exports with a significant economic impact. On the other hand, the COVID-19 epidemic has severely impacted Jordan's SMEs because they were ill-prepared to handle the situation. Indeed, Mercy Corps [33] reported that Jordan offers a somber picture of the effects on SMEs, including SC disruption, decreased trading, and lower cash flow, their analysis concludes that evolving customer tastes, trading in the future, and significant unpredictability are the biggest concerns.

Moreover, due to increasing pressure from global firms operating in their local market, Jordanian SMEs are starting to adhere to new laws, rules, and conventions. Nonetheless, businesses in Jordan have been found to only partially adhere to the concept and paradigm of sustainable development until this point [29]. According to a survey by JEDCO [6], 90% of SMEs in Jordan have erroneously interpreted the concept and paradigm of sustainable development. In the same vein, there have been few studies on these topics in the context of Jordan. The Jordanian government and international bodies encourage sustainable development, offering policies that encourage and improve sustainability for SMEs [34]. This focus led the researchers to undertake this study due to the significant pressure from the Jordanian government and bodies on SMEs to adopt SEO and sustainability in their operations.

Furthermore, an International Labor Organization, UNDP [35] and JEDCO [6] evaluated the effects of COVID-19 on

Jordanian SMEs and clearly revealed that the biggest problems they have to deal with were the decline in consumer demand for their goods and the low level of their revenue as a result of poor strategic planning and absence of the SEO, which ultimately prevented them from achieving economic sustainability. Likewise, they failed to fulfill the obligations related to environmental and social sustainability. SEO helps SMEs grow their market share, production effectiveness, and revenue [29]. SEO through SSCM enables SMEs to offer different products that can improve sustainability in general [14]. In the same vein, JEDCO [6] confirmed the importance of SEO for national economic growth and the promotion of sustainability. Tipu [14] consider organizational capabilities crucial to achieving innovation, and sustainability success for SMEs.

While doing so, a recent evaluation of the JRP brought attention to the importance of sustainability and innovation across several SMEs industrial sectors for improved future food security by meeting the needs of the current generation while preserving the ability of future generations to meet their own needs [7]. As mentioned above, the Jordanian government provides regulations for SMEs to stimulate their efforts to help them enhance their sustainability outcomes.

The linkages between SEO, SSCM, and sustainability performance have never been explored in the Jordanian context. Jordanian SMEs encounter several challenges in implementing SEO and SSCM practices to achieve sustainability goals [34]. Relationships and networks between actors (organizations, suppliers, government agencies, distributors, and retailers) across SSCM channels are fundamental for efficiently fulfilling innovations to boost sustainability [16]. Another difficulty is that Jordanian SMEs are unaware of the full extent of the organizational capabilities and how particularly the innovations might help them improve sustainability [6]. Based on those mentioned above, this research seeks to propose a conceptual model for understanding the association between SEO, SSCM, and Jordanian SMEs sustainability performance.

## 3. A PROPOSED CONCEPTUAL MODEL OF STRATEGIC ENTREPRENEURSHIP ORIENTATIONS

An accurate examination of the pertinent literature asserts that there is no unanimity about the indicators of SEO, entrepreneurial orientations (EO), or corporate entrepreneurship (CR) through various review studies that have specified the indicators of SEO. For instance, Mthanti and Ojah [36] reported that risk-taking, innovativeness, and proactiveness were widely used as indicators of SEO. In addition to the aforementioned indicators, Sahoo and Yadav [37] demonstrated autonomy and aggressiveness among the SEO orientations. Accordingly, this study seeks to contribute to the existing literature by identifying the indicators of SEO for Jordanian SMEs.

Organizations' SEO integrates the concepts of entrepreneurship and strategy as it is referred to as "entrepreneurial actions with a strategic perspective." Entrepreneurship places a greater emphasis on opportunistic behavior, in which businesses spot market possibilities they could potentially exploit to increase their market share. Meanwhile, strategic management underlines achieving sustainability in terms of economic [38], environmental [39], and social performance [40]. Although there are studies about

entrepreneurial organizations' strategic orientations, little is known about the mechanization underlying SEO to sustainability performance. This is likely to discover the black box between SEO and SBP. In light of this reasoning, we proposed SSCM as a mediator linking Jordanian SMEs SEO to sustainability performance (for example, economic, social, and environmental) outcomes.

In addition, JEDCO [6] certainly pointed out that the linkage between SEO and sustainability outcomes remains largely unexplored in the Jordanian context. Though restricted in number, proofs are clarifying that SSCM practices play a vital role as a mediator in the effect of entrepreneurial orientations on sustainability performance [19]. However, the management of the organization has to know whether its SEO, value creation, relationships, and networks for various actors along the SC foster green positive practices and sustainability outcomes.

## 3.1 Theoretical framework

The RBV is one of the most cited theories in business and management research. Organizations are profit-maximizing entities that operate logically in special markets based on the deployment of intangible (non-replaceable, inimitable, rare, and valuable) and tangible resources to create and sustain a competitive advantage [41]. Paulraj [42] proposed that theories such as RBV would better explain how SEO is related to various sustainability outcomes. Our research goes a step further and draws on two theories, RBV and SCT, to propose a conceptual model explaining the SEO indicators to enhance sustainability. In addition to the RBV and SCT, the relevant literature was scanned to develop the propositions involving key variables of the proposed model.

The RBV asserts that organizational resources must establish particular characteristics in order to establish competitive advantage and achieve excellent sustainability levels. These must be: first, valuable, meaning the firms can take advantage of opportunities or neutralize threats, enabling it to lower production costs or stand out from its competitors; second, unique, i.e., a valuable resource that is difficult to come by among competitors; finally, non-substitutable refers to not being able to be reproduced or substituted (or being too expensive to duplicate or substitute), which is not practical for an organization to copy or imitate [43]. Inquiry into the causes of entrepreneurship has recently been directed using the RBV as a fundamental paradigm [44]. According to the RBV theory, a firm's sustainability comes from resources and competencies that are unique to that firm [44].

On the other hand, SCT has been used in research in several operations' management and SSCM fields, including GSCM [40], product development and quality management, human resource management [45], sustainability [22], and entrepreneurial networks [46]. The SCT and RBV offer SMEs an opportunity to make use of uncommon and valuable resources that are challenging for other businesses to reproduce and replace, expanding their capability and resource base [47]. The existence or absence of social networks affects SMEs performance in acquiring resources, making them crucial factors that no SMEs can disregard and expect to achieve sustainable performance. Because it depends on social context, implying that entrepreneurship is a socioeconomic activity, and entrepreneurs are also products of their social environments [48].

In the same vein, many scholars have investigated the role

of SEO in practicing SSCM [49, 50]. Adopting SEO in SSCM may be the most significant factor that offers new technologies, services, products, and processes, helping SMEs meet new demands [49]. Relatively, numerous academics have investigated SEO in the SC from various theoretical perspectives (for example, SCM, RBV, SCT, TBL, and network theory).

In this particular field, research and practical application have grown over the past 10 years [27]. When used in conjunction with corporate social responsibility (CSR) strategies, SCM enables businesses to achieve greater resource and logistics efficiency while adhering to sustainability's three pillars: environmental, social, and economic objectives [18]. Additionally, a variety of businesses across the SC perform particular activities from raw materials to the final consumer. Among these businesses are retailers, who can provide value to their company and other businesses in a variety of ways, from products to procedures. Through the SC, these entrepreneurial firms take numerous risks in order to compete with other businesses. As a result, these entrepreneurial firms need the necessary resources to adopt SCM effectively [51]. Based on creative thinking in order to accomplish sustainability goals, entrepreneurial chains create connections between buyers and suppliers [52].

In light of SCT, which is regarded as one of the most prevalent theories for elucidating the effects of buyer-supplier connections on organizational sustainability outcomes, the conceptual framework of SEO provided in this study can be understood [22]. This theory contends that individuals in a network are more likely to act in ways that help other individuals to preserve the link in their social network. According to Handfield [53], who used organizational research literature to describe inter-firm interactions and activities, SSCM was acknowledged as a beneficial tool for gaining access to resources, and successfully obtaining sustainable advantage.

## 3.2 Strategic entrepreneurship orientation

The extant studies present evidence regarding the impacts of the indicators of SEO, the organizational capabilities, and the impacts of overall strategic orientations on sustainability performance through various mediating mechanisms. For example, Paulraj [17] carried out a study on manufacturing companies in the USA, and the findings showed that SEO positively and significantly impacts SBP through SSCM practices. Another research in Pakistan reported that SSCM practices completely mediated the impact of SEO on sustainability performance [14]. In the same country, Fantazy and Tipu [54] study showed that a culture of competitiveness mediated the impact of SEO on sustainability outcomes, while knowledge development and SSCM partly mediated the effects of innovativeness orientation on SBP. While investigating in Turkey, Bouguerra et al. [55] indicated that SEO was significantly linked to environmental collaboration via work engagement and market environment complexity.

Deslatte and Swann [56] found that performance management, as manifested by several practices such as information acquisition, information use, and information dissemination, completely mediated the effect of SEO represented by risk-taking, innovativeness, and proactiveness toward sustainability outcomes in the USA. A study in Bangladeshi textile manufacturing firms asserted that work market orientation partly mediated the impact of SEO on

sustainable goal development [57]. An instant conclusion that can be made from the aforementioned studies is that an overall measure of organizational SEO (including indicators such as; risk-taking, innovativeness, and proactiveness) can be used to ascertain their effects on sustainability performance.

The conceptual framework of SEO is presented in Figure 1. Associating SEO to sustainability is still a hot topic [55]. which explains the alignment of diverse SEO firms' orientations (Risk-taking, innovativeness, proactiveness) to an organization's sustainability outcomes. Simply put, SEO is the result of increasing pressure from governments and international agencies to fight poverty and unemployment and enhance sustainability outcomes in general. As depicted in Figure 1, Risk-taking, innovativeness, and proactiveness are recognized as SEO indications. Based on a thorough assessment of the pertinent texts, the writers of this study unanimously agreed on the aforementioned SEO indications. Having SEO in place is essential since sustainability actions require organizational capabilities to be implemented effectively [56]. This implies that SEO played a part in enhancing sustainability performance outcomes.

On the other hand, entrepreneurial businesses must "walk the talk". Organizational hypocrisy is more particularly the discrepancy between an organization's formal structures and how those structures are actually used on a daily basis [55]. This discrepancy between talk and reality is referred to as "greenwashing" [56]. Such inconsistent behavior reduced the supplier's desire to embrace sustainability practices [40], as well as the absence of positive sustainability behaviors. In order to meet rising demands from buying firms for better business deals involving cost reduction, greater order flexibility, and shorter lead times, suppliers are frequently forced to take unethical actions, some of which can amount to modern slavery practices, such as child labor, forced labor, and health and safety issues. This is especially true for those who from weak regulatory environments organizations do not operate within strategic orientations

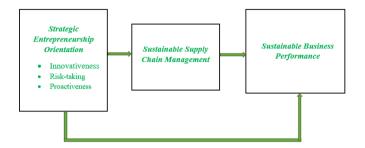
Managers may assert that they developed and put SEO into place with the SC partners. Suppliers' perceptions of entrepreneurial enterprises' commitment to environmental, social, and economic sustainability may negatively affect their SSCM practices and, as a result, may cause them to not support sustainability objectives. SEO could solve the aforementioned issue by helping SMEs implement entrepreneurial sustainable practices and procedures [27].

To ensure sustainability superiority, SMEs in emerging markets in particular should realize the importance and value of SEO by executing SSCM-based efforts and creating green innovative products. The adoption of a proactive management attitude, exemplified by a sustainable entrepreneurial stance that supports SSCM-based activities and the creation of distinctive green products, is also urged by SME managers. Thus, SEO-based SMEs can use the implication of sustainable practices and the submission of new products as effective mechanisms to improve their commitment to improving financial gains, safeguarding the natural environment, and accomplishing sustainability goals [55].

## 3.2.1 Innovativeness

Global marketplaces have undergone rapid transformation, which has increased rivalry, reduced value creation, and adversely affected the efficacy of firms' goods and services [55]. One of the key components of SMEs strategies to create fresh concepts that result in new or enhanced methods, goods,

and services is their innovativeness. Innovativeness also gives SMEs a competitive edge due to external developments [56]. Schumpeter [58] first recognized the importance of innovation, comparing it to "creative destruction". In addition, their study explained that entrepreneurs should start the wealth generation process by introducing new products and services that move resources from existing businesses to new businesses and offer new businesses a growing edge. As a result, current goods, services, and market systems are destroyed [57].



**Figure 1.** A proposed conceptual model of strategic entrepreneurship orientations

According to previous studies, innovation has a beneficial and significant effect on SMEs sustainability success [27, 57]. SMEs will also be better equipped to adjust to changing consumer expectations, engage in active market competition, and produce new goods and services to fend off outside market pressure if they embrace innovation [57].

In the Jordanian context, Abdulaal and Nordin [59] found that knowledge management, human resource management, and innovativeness must be included in the SMEs culture to assist the nation's economy, environment, and society. Likewise, Al-Abbadi et al. [60] investigated the effects of entrepreneurial orientations and the performance of Jordanian SMEs, their findings suggested that SMEs should create solid networks and consider unique strategic alliances to create competitive sustainability and advantage. Further, entrepreneurial networks help Jordanian SMEs gain external knowledge and transform that knowledge into internal capabilities, which is essential for developing new products, goods, and services compatible with global sustainability requirements [27]. Further, Almomani et al. [61] explored the effect of innovativeness, organizational memory, knowledge management, and quality cost on Jordanian SMEs sustainability performance. The study found significant and positive effects of innovativeness on overall sustainability performance.

## 3.2.2 Risk-taking

This refers to a manager's predisposition to join new or existing markets, invest resources in ventures that might have unexpected outcomes, or not be risk-averse when investing resources in a business idea that other SMEs are cautious about [62]. Because risk-taking has always been associated with entrepreneurship [63], it is a crucial SEO indicator when assessing the level of SEO among SMEs. The risk-taking dimension of entrepreneurial firms' strategic stances signals a SMEs willingness to take risks reflecting its decisions regarding critical resources allocating and scaling or developing new products or exploring new market opportunities [63].

Research suggests that SMEs risk-taking capacity is between low and moderate. Comparative to those who choose

very low risk-taking levels, those who adopt a moderate level of risk-taking produce excellent performance [64]. This finding supported the widely held maxim that risk-taking SMEs can achieve greater growth and sustained profitability than those who eschew risk [65]. This viewpoint supported the maxim of the risk-returned theory, according to which the riskier the situation, the greater the return, and, as a result, this leads SMEs to achieve sustainable performance [66]. Hence, SMEs that wish to thrive must accept some level of risk-taking to achieve the targeted sustainability level [49].

Divergent opinions exist on how taking risks affects SMEs sustainability performance. Other studies such as Fantazy and Tipu [14], Hattar [27], and Kosa et al. [67] showed a significant and positive relationship between risk-taking and SMEs sustainability performance; however, other research found no influence or a negative effect on SMEs sustainability outcomes [52]. Therefore, additional research is necessary to confirm these findings among Jordanian SMEs.

In the Jordanian context, Almomani et al. [61] highlighted that the EO of SMEs, like proactiveness and risk-taking, help them further develop dynamic capabilities that ultimately can lead to enhanced SBP outcomes. Additionally, Alhnity et al. [68] investigated the moderating role of government intervention in the impact of SEO on SMEs sustainability; results indicate that Jordanian SMEs owners need to adopt risk-taking to realize better SBP. In the same vein, the authors [69, 70] found that risk-taking is a significant indicator of business. operational sustainable and competitiveness, and new product development among Jordanian SMEs. Finally, Masa'deh et al. [70] also found that SEO, particularly risk-taking, was significantly and positively associated with sustainability for the manufacturing SMEs in Jordan.

## 3.2.3 Proactiveness

A proactive business will launch new procedures, goods, and services ahead of its competitors to set the pace, make the first moves, or achieve the first mover advantage in satisfying client expectations in any given situation. A proactive company will take the initiative to offer new products, goods, or services that are different from those of its rivals. Proactiveness is an opportunity-seeking, forward-looking mindset [71]. Entrepreneurial firms constantly try to set the pace and do not copy the innovations of other businesses [71], demonstrating that they see opportunities and are more perceptive and attentive to market signals than competitors [72].

The literature indicates proactiveness's positive and significant effect on SMEs sustainability performance. For instance, Bature et al. [73], Hattar [27], and Tipu and Fantazy [14] indicate that SMEs "with high response capacity" should prioritize being proactive in their operations and constantly work to be ahead of the competition in spotting and seizing potentials related to sustainability. SMEs should focus on improving their human resource capability in order to be able to identify timely opportunities to meet the needs of the present and future populations, influence policymakers, set the pace for the market based on their market share, adopt green technology usage, and keep up with technological advancements. The causes for small enterprises' lack of interest in environmental concerns were compiled by Nasip et al. [46], who also highlighted the significance of specific resources for the implementation of pro-environmental policies.

Furthermore, Al-Jinini et al. [74] demonstrated that all three SEO dimensions proposed to represent the SEO in this study had positively and significantly affected social sustainability in SMEs operating in Jordan. In particular, proactiveness and risk-taking were found to have the most stimulating effects on SMEs social sustainability. Additionally, Alhnity et al. [68] examined the connections between global EO and the influence of the Jordanian Government's intervention on the sustainability of the local SME industry. Their results indicated that Jordanian SME owners need to adopt global SEO to realize better SBP, meaning Jordanian SMEs sustainability performance will be better if proactiveness is exclusively practiced.

Overall, SEO significantly impacts Jordanian SMEs operational and strategic practices and their sustainability outcomes. The literature also showed that SEO adaption would surely lead SMEs to achieve better sustainability results, especially when risk-taking facilitates adaptation to a dynamic environment [14, 27]. Various components of SEO also mandate new activities and configurations to provide greater flexibility facilitating proactive and reactive responses to environment-driven changes. Implicitly, the arguments and results from the previous section show that SEO can be characterized as being inventive, risk-taking, and proactiveness. This suggests the following proposition:

**Proposition 1.** SEO is manifested by innovativeness, risk-taking, and proactiveness in Jordanian SMEs

## 3.3 Sustainable supply chain management

Massive industrial expansion and economic globalization during the past 50 years have raised serious environmental issues such as loss of natural resources, climate change, and pollution. Environmentalists have exerted significant pressure on organizations since environmental concerns first developed in the 1960s and gained prominence in the 1990s. Organizations at all SC levels are now considering adopting sustainable initiatives, and practices as organizational responses to these problems have expanded beyond internal operations to include the entire SC. The above-mentioned concerns lead researchers to emphasize and introduce SSCM in the production system [52].

According to Srivastava [75], who defined SSCM that is the most frequently used, it entails the integration of environmental thinking into all aspects of the SC, including product design, end-of-life management of the product after its useful life and manufacturing processes, selection, delivery of the finished product to consumers, as well as material sourcing. Many other authors, including Kraus et al. [76] and Petljak et al. [77] have used this definition, which emphasizes the various intentional practices that an organization might adopt to incorporate environmental concerns throughout the entire SC so that it becomes an SSCM.

Even though there are numerous definitions for the "SSCM," term there are some similarities among them. For example, the environmental/green dimension is a common focus of all definitions [78], and the green focus is both internal and external and involves all SC participants, which entails integrating the environmental dimension within the conventional SC [79]. In order to strengthen the environmental, economic, and social influences of SMEs on the SC and to achieve adequate sustainability performance and competitiveness, a common idea of SSCM is integrating environmental issues into SC [49].

SSCM activities positively Hence. impact entrepreneurial firm's sustainability outcomes, and businesses are becoming more eager to work with SC partners on sustainability projects [14, 27]. The existing body of research backs up the link between SSCM and local organizations' performance. Golicic and Smith [80] analyzed more than 20 vears of study on environmental SC practices and their overall impacts on SBP, the findings demonstrated a strong and favorable relationship between environmental SC practices and sustainability performance. Additionally, Sarkis et al. [81] empirically investigated Chinese industry. Using moderated hierarchical regression, an investigation of data from 341 Chinese firm respondents found a favorable correlation between sustainability and SSCM practices.

To investigate SSCM and its connection to sustainability performance, Lee and Jones [82] carried out an empirical study on 223 Korean SMEs in the electronics sector, discovering a good correlation between SSCM and sustainability. Likewise, A theoretical model of the various institutional pressures that drive manufacturing organizations to pursue SSCM practices and appropriate sustainability outcomes was created and empirically evaluated by Zhu et al. [83], researchers looked at 396 Chinese manufacturers and discovered that institutional forces influence how these companies implement internal sustainable practices linked to the practices they employ for their external supplier chains, the outcomes also revealed how SSCM procedures indirectly enhanced sustainability outcomes.

Research on SSCM practices in the Middle East, particularly in Jordan, is scant. The Middle East has always played a significant role as a vital crossroads between Asia, Europe, and Africa. With the growth of the oil industry, in particular, this diversified region's significance has cautiously increased and influenced other significant industrialized countries [70]. Jordan is a small nation with few natural resources situated in the Middle East's turbulent and war-torn region. Jordan has seen numerous refugee crises as well. All these factors have exerted immense pressure on the natural environment and raised many concerns about Jordan's environmental situation. However, little is known about how SMEs have responded to these concerns and pressures and whether they adopted any SSCM practices. Some have examined this issue. For example, Abdellatif and Graham [84] examined the impact of SSCM on Jordan SMEs, they found that SMEs showed commitment and interest in protecting the environment despite the absence of governmental regulations by adopting a range of SSCM. Meanwhile, Alshura et al. [85] suggested that SSCM was significantly and positively related to Jordanian SMEs sustainability outcomes.

All the organizational strategies are simultaneously related to the organization's sustainability outcomes. Thus, teamwork, taking care of stakeholders and suppliers, and having a unified perspective concerning the future are required to implement sustainable development strategies, product stewardship, and pollution prevention. Tibon [86] said that a firm that can generate and employ knowledge as a team could prevent pollution at its source. The capacity to take care of stakeholders translates to reducing the environmental operation impacts. Moreover, when an organization moves forward in a single direction toward achieving future organizational goals, it can better consider its operations' long-term environmental impacts. The idea that organizational competencies have a favorable impact on proactive environmental policies is supported empirically by Tibon [86]

and Tipu [14]. In one-to-one contacts, all organizational capacities were discovered to be a major factor, while at least one organizational capability was discovered to be significant in one-to-three interactions.

This study assumes that the relationship between SEO and sustainability performance could be mediated by the factors that help Jordanian SMEs to manage, improve, and sustain their performance. The notion that SEO enhances SSCM processes helps improve sustainability results and plays a significant role in sustainability outcomes. In addition, they are considering the significance of the sustainability characteristics of the TBL model (economic, environmental, and social) [27]. It is claimed that SSCM can operate as a mediator in the success of achieving sustainability, directing firms toward effective SBP. According to contingency theory, the relationship between two variables depends on a third variable [87]. As a result, incorporating mediation into the model helps to reduce erroneous results and increase accuracy [88]. This study argues that while SEO is necessary, the effectiveness of the entire sustainability mechanism also depends on how these services are delivered to clients. Therefore, SSCM can much more effectively contribute to sustainable development than outcomes that were developed without considering sustainability-related (environment, social and economic). Thus, the above discussion and arguments lead to the following proposition:

**Proposition 2.** As manifested by innovativeness, risktaking, and proactiveness, SEO fosters SMEs sustainable supply chain management in Jordanian SMEs.

## 3.4 Differential pathways

As above-mentioned discussed, we incorporate underresearched SSCM practices as a mediation between the SEO and multiple positive sustainability outcomes into the proposed model. This void is evident in recent empirical pieces and review studies by Afum et al. [49], Hattar [27], and Tipu and Fantazy [14]. According to Alghababsheh and Gallear [40], most organizations consider sustainability as an expression of their true selves, increase their feelings of participation in sustainability initiatives to protect the earth, and society and ensure economic growth, and, consequently nurtures persistent efforts to enhance sustainability outcomes. This suggests a positive relationship between SSCM and sustainability performance. Providing and involving SC partners with SSCM practices motivates them to consider economic, social, and environmental sustainability outcomes more. SEO can enhance suppliers' engagement and therefore offers and leads to sustainable performance. Reformulation of RBV theory offers guidelines to develop these linkages [49]. Specifically, the inclusion of SSCM practices in SEO results in positive responses such as sustainability outcomes. This is because entrepreneurial organizations assess SSCM practices as positive and significant sustainability outcomes. SC partners who are work-engaged and adopt sustainable practices to their daily activities as a result of EO exhibit sustainability such as environmental, social, and economic performance.

Afum et al. [49] and Tipu and Fantazy [14] pointed out empirical research about SEO and its potential consequences on sustainability outcomes. As mentioned above, what is missing in the literature is a parsimonious framework that unravels the fundamental mechanisms relating SEO to multiple sustainability outcomes. The SMEs and sustainability

literature are devoid of evidence regarding the effectiveness of SSCM practices in the bonding between the indicators of SEO and multiple sustainability outcomes such as economic, social, and environmental performance. This is a significant void because SMEs organizations need suppliers who are highly engaged in SSCM practices via the effective implementation of SEO so that they can offer sustainability at superior levels.

In recent research carried out at SMEs level in India, Sahoo and Yadav [37] demonstrated that SEO positively impacts sustainable performance. In another study on SMEs in Nigeria, Burge [89] asserted that several components of SEO such as innovativeness, proactiveness, and risk-taking were positively related to SBP. Similarly, Junaid et al. [90] found that SEO positively and significantly impacts the chain of SMEs social sustainability. In another research drawing upon SCT theory conducted in the SMEs sector in Pakistan by Shafique et al. [91], the result confirmed that SMEs are capable of creating a suitable context with Green SEO components. In the same vein, another research carried out in SMEs organizations in Pakistan indicated that social capital and SSCM serially mediated the impact of SEO on sustainable performance [14].

Hattar [27] found that SSCM practices completely mediated the effect of SEO on sustainability results. In a recent study on manufacturing organizations in turkey, Bouguerra et al. [55] indicated that suppliers' engagement in green initiatives significantly mediated the linkage between SEO and sustainability outcomes. Another research by Gali et al. [92] in Australia found that suppliers' social performance completely mediated the impact of entrepreneurial strategic stances on sustainable development success.

In this study, we argue the mediation impact of SSCM in the association between SEO and multiple sustainability outcomes. Recent empirical evidence suggests that the availability of organizational capabilities helps organizations build and sustain a competitive advantage [14, 49]. Further, Junaid et al. [90] highlight SSCM as a more proximal variable to enhance sustainability outcomes. SSCM refers to the three pillars of sustainable development including environmental, economic, and social performance [75]. Organizations are under more and more pressure to improve society, lessen their influence on the environment, and make money as well as stakeholders play crucial roles in motivating SC partners to engage in SSCM activities [77].

In addition to improving an organization's financial performance, SSCM takes into account factors like ethical working conditions and ecologically responsible production [40]. Recent evidence supports the notion that SSCM is a significant determinant of cost savings due to design for reuse, reduced packaging, recycling, lower disposal costs, and improved working conditions [93]. Hence, the following propositions are developed:

**Proposition 3.** As manifested by innovativeness, risktaking, and proactiveness, SEO is linked to sustainable business performance (economic, social, and environmental) through sustainable supply chain management in Jordanian SMEs.

## 4. CONCLUSIONS

Previous research in the context of Jordan showed a lack of efficiency, effectiveness, and productivity in Jordanian SME sustainability practices and SEO. However, the Jordanian government requires SMEs to contribute further to the development of the Jordanian economy, the environment, and

society [6]. Further, it is also found that Jordanian SMEs did not attain a global innovation level and engage in traditional SBP practices. Moreover, Jordanian SMEs are unaware of their significant role in achieving sustainability goals following the regulations provided by the Jordanian government, especially with the huge population increase caused by the movement of refugees from neighboring countries due to several political and economic problems. However, Jordanian SMEs as an entrepreneurial firm in the current global economic situation, especially in the surrounding countries, have to adopt a strategic stance with SC partners that could lead them to play critical roles in enhancing the economic, environmental, and social aspects of Jordan and the Middle East.

Hence, considering the above-mentioned issues, this study developed a conceptual model of SEO for Jordanian SMEs using the RBV and SCT as the theoretical underpinnings. Precisely, this study links SEO to SMEs sustainability performance, including economic, environmental, and social outcomes, through the mediating roles of SSCM. It is implied that various indicators of SEO, such as innovativeness, risktaking, and proactiveness play crucial roles in helping SMEs to develop new products and enhance their market share. Specifically, SEO led SMEs to adopt essential SSCM practices, which ultimately help improve multiple sustainable performance outcomes. The proposed conceptual model indicates that Jordanian SMEs must strengthen their strategic orientations toward implementing an SSCM system. This would certainly assist SMEs to control adverse environmental effects and boost profitability, thus, significantly contributing to sustainable development. This paper also provides various theoretical contributions and creates avenues for future research. The next section discusses the theoretical and managerial implications and subsequent future research directions.

The study had some classifier variables based on the main objective of the current research, which further restrict our search roster. While this might not be comprehensive enough given the enormous scholarly outputs and databases established regularly it could be considered exhaustive enough to conclude, moreover, it is potential that the method utilized in the development of the unified conceptual model presented in this study could not seize all the indicators of SEO in the existing literature. In addition, this study is only a theoretical investigation, not the empirical one, an empirical application will be necessary to validate the framework.

## 4.1 Theoretical contributions

Organizational sustainability performance depends on successfully implementing SEO [27, 49]. Due to greater sustainability awareness, organizations must now include economic, social, and environmental challenges within their strategies, objectives, and mission. This also applies to the SEO parts of the entire process in the SME sector, which injects environmental sustainability. In light of this argument, the current study filled many gaps in the literature on SMEs and sustainability by creating a lean model of SEO. First, it has been noted that SEO benefits on SMEs sustainability performance outcomes are mediated by SSCM [14]. The available data does not support the underlying mechanisms by which SEO is associated with Jordanian SMEs sustainability performance. As a result, the fundamental mechanisms by which SEO affects the sustainability performance of SMEs are

used in our article to support SSCM. This assists us in illuminating the mystery surrounding the relationship between various SBP outcomes for Jordanian SMEs and their SEO approaches.

Next, a recent literature review demonstrated that SEO like innovation, risk-taking, and proactivity could be adapted to "enviropreneurship" orientations [94]. No agreement exists among researchers regarding the components or indicators that can be included in the enviropreneurship orientations [95]. To address this issue, this paper established three SEO indicators: innovativeness, risk-taking, and proactiveness, based on a synthesis of the pertinent literature and green SEO of the leading businesses in SMEs. At last, we could determine whether the abovementioned mediator would continue to help explain the impact of SEO on various sustainability performance outcomes by incorporating it into the conceptual framework of SEO proposed in this paper.

## 4.2 Implications for business practice

Many SMEs are now concerned with green strategy planning and economic, social, and environmental sustainability in today's cutthroat world. The following applications are possible for the conceptual model of SEO that are presented in our research. First, Jordanian SMEs can use the SEO indicators to help decide whether to promote or invest in green entrepreneurship practices. Second, SMEs should not focus only on one of the sustainability aspects, economic, social, and environmental sustainability performance are all important in their own right. Next, management should make certain that the successful fulfillment of SEO triggers their supply chain partners' engagement and commitment to SSCM practices. This is so important since top executives need to formulate strategies that could reduce the cost of operation, protect the earth, and ensure welfare for society in general. Such an objective can be achieved through superior cooperation with the supplier's activities, thereby creating a competitive edge and improving the economic performance of the SMEs. At last, SMEs in Jordan can benefit from modern technology and artificial intelligence [27], to introduce green ideas and initiate environmental sustainability programs for SC partners and customers.

## 4.3 Future research directions

As Marshall et al. [96] noted in their analysis, SEO is now unquestionably a viable academic area due to the ongoing awareness of sustainability. To validate the connections illustrated in the conceptual framework, empirical research is required. For instance, proof is required for the claim that SEO indicators can improve SSCM. This need for research is crucial because SMEs cannot accomplish sustainability objectives without supplier participation in the process. An international study could be conducted to expand the database. To evaluate the linkages suggested in the conceptual model, data could be gathered from various nations of distinct global regions.

Next, further research is required to research the causes, moderators, mediators, and effects of SEO at the individual and organizational levels. Managerial personality traits like competitiveness, emotional intelligence, and self-efficacy could be viewed as the antecedents of SEO and incorporated into the conceptual model. Likewise, entrepreneurial competencies could also play a vital role in the association's

SEO and sustainability framework. entrepreneurial competencies are knowledge, skills, abilities, values, attitudes, personality, and expertise [97]. Hence, Future studies can further expand the SEO model by identifying and incorporating essential entrepreneurial competencies to achieve superior sustainable performance. Moreover, the effects of current technological advancements on SEO could be an interesting subject of future studies. Future studies could, for instance, look at how virtual assistants and operational strategy affect the relationship between SMEs sustainability performance and their SEO.

Future research can test social capital (cognitive, structural, and relational) as a mediator in the effect of SEO on sustainability performance. The mediating role of social capital in the relationships between SEO and work-SSCM can also be taken into consideration. Finally, future research should employ procedural and statistical controls to reduce the issue of common method variance. For instance, supervisor ratings and time-lag design for sustainability performance might be helpful. As a last thought, hoping that the conceptual framework of SEO put forward in this study will motivate more academics to investigate these important topics and react to future requests for research.

## REFERENCES

- [1] Grant, E.H.C., Muths, E., Katz, R.A., Canessa, S., Adams, M.J., Ballard, J.R., White, C.L. (2017). Using decision analysis to support proactive management of emerging infectious wildlife diseases. Frontiers in Ecology and the Environment, 15(4): 214-221. https://doi.org/10.1002/fee.1481
- [2] Pagell, M., Gobeli, D. (2009). How plant managers' experiences and attitudes toward sustainability relate to operational performance. Production and Operations Management, 18(3): 278-299. https://doi.org/10.1111/j.1937-5956.2009.01050.x
- [3] Gouda, S.K., Saranga, H. (2018). Sustainable supply chains for supply chain sustainability: Impact of sustainability efforts on supply chain risk. International Journal of Production Research, 56(17): 5820-5835. https://doi.org/10.1080/00207543.2018.1456695
- [4] Hill, J., McGowan, P. (1999). Small business and enterprise development: Questions about research methodology. International Journal of Entrepreneurial Behavior & Research, 5(1): 5-18. https://doi.org/10.1108/13552559910259829
- [5] Raggad, B. (2018). Carbon dioxide emissions, economic growth, energy use, and urbanization in Saudi Arabia: Evidence from the ARDL approach and impulse saturation break tests. Environmental Science and Pollution Research, 25: 14882-14898. https://doi.org/10.1007/s11356-018-1698-7.
- [6] Jordan Enterprise Development Corporation (JEDCO). (2020). http://jedco.gov.jo/Default/En, accessed on May 16, 2022.
- Jordan Response Plan for the Syria Crisis 2016-2018 -Jordan (JRP). (2016). https://reliefweb.int/report/jordan/jordan-response-plan-syria-crisis-2016-2018, accessed on May 16, 2022.
- [8] Department of Antiquities (DOA). (2018). Annual report. http://doa.gov.jo/homeen.aspx., accessed on May 16, 2022.

- [9] Haseeb, M., Hussain, H.I., Kot, S., Androniceanu, A., Jermsittiparsert, K. (2019). Role of social and technological challenges in achieving a sustainable competitive advantage and sustainable business performance. Sustainability, 11(14): 3811. https://doi.org/10.3390/su11143811
- [10] Arregle, J.L., Batjargal, B., Hitt, M.A., Webb, J.W., Miller, T., Tsui, A.S. (2015). Family ties in entrepreneurs' social networks and new venture growth. Entrepreneurship theory and Practice, 39(2): 313-344. https://doi.org/10.1111/etap.12044
- [11] Ireland, R.D., Hitt, M.A., Sirmon, D.G. (2003). A model of strategic entrepreneurship: The construct and its dimensions. Journal of Management, 29(6): 963-989. https://doi.org/10.1016/S0149-2063 03 00086-2
- [12] Asadi, S., Pourhashemi, S.O., Nilashi, M., Abdullah, R., Samad, S., Yadegaridehkordi, E., Razali, N.S. (2020). Investigating influence of green innovation on sustainability performance: A case on Malaysian hotel industry. Journal of Cleaner Production, 258: 120860. https://doi.org/10.1016/j.jclepro.2020.120860
- [13] Zainol, N.R., Al Mamun, A. (2018). Entrepreneurial competency, competitive advantage and performance of informal women micro-entrepreneurs in Kelantan, Malaysia. Journal of Enterprising Communities: People and Places in the Global Economy. https://doi.org/10.1108/JEC-11-2017-0090
- [14] Tipu, S.A.A., Fantazy, K. (2018). Exploring the relationships of strategic entrepreneurship and social capital to sustainable supply chain management and organizational performance. International Journal of Productivity and Performance Management, 67(9): 2046-2070. https://doi.org/10.1108/IJPPM-04-2017-0084
- [15] Quaddus, M., Woodside, A.G. (Eds.). (2015). Sustaining competitive advantage via business intelligence, knowledge management, and system dynamics. Emerald Group Publishing. https://doi.org/10.1108/s1069-09642015000022b005
- [16] Manatsa, P.R., McLaren, T.S. (2008). Information sharing in a supply chain: Using agency theory to guide the design of incentives. Supply Chain Forum: An International Journal, 9(1): 18-26. https://doi.org/10.1080/16258312.2008.11517187
- [17] Paulraj, A. (2011). Understanding the relationships between internal resources and capabilities, sustainable supply management and organizational sustainability. Journal of Supply Chain Management, 47(1): 19-37. https://doi.org/10.1111/j.1745-493X.2010.03212.x
- [18] Alghababsheh, M., Gallear, D. (2021). Socially sustainable supply chain management and suppliers' social performance: The role of social capital. Journal of Business Ethics, 173: 855-875. https://doi.org/10.1007/s10551-020-04525-1
- [19] Afum, E., Issau, K., Agyabeng-Mensah, Y., Baah, C., Dacosta, E., Essandoh, E., Agyenim Boateng, E. (2023). The missing links of sustainable supply chain management and green radical product innovation between sustainable entrepreneurship orientation and sustainability performance. Journal of Engineering, Design and Technology, 21(1): 167-187. https://doi.org/10.1108/JEDT-05-2021-0267
- [20] Bernardes, E.S. (2010). The effect of supply management on aspects of social capital and the impact

- on performance: A social network perspective. Journal of Supply Chain Management, 46(1): 45-55. https://doi.org/10.1111/j.1745-493X.2009.03185.x
- [21] Gavronski, I., Klassen, R.D., Vachon, S., do Nascimento. L.F.M. (2011). A resource-based view of green supply management. Transportation Research Part E: Logistics and Transportation Review, 47(6): 872-885. https://doi.org/10.1016/j.tre.2011.05.018
- [22] Alghababsheh, M., Gallear, D. (2020). Social capital in buyer-supplier relationships: A review of antecedents, benefits, risks, and boundary conditions. Industrial Marketing Management, 91: 338-361. https://doi.org/10.1016/j.indmarman.2020.10.003
- [23] Denyer, D., Tranfield, D. (2009). Producing a systematic review. In D. A. Buchanan & A. Bryman (Eds.), The Sage handbook of organizational research methods (pp. 671-689). Sage Publications Ltd.
- [24] Aliaga-Isla, R., Rialp, A. (2013). Systematic review of immigrant entrepreneurship literature: Previous findings and ways forward. Entrepreneurship & Regional Development, 25(9-10): 819-844. http://dx.doi.org/10.1080/08985626.2013.845694
- [25] Gupta, V.K., Batra, S. (2016). Entrepreneurial orientation and firm performance in Indian SMEs: Universal and contingency perspectives. International Small Business Journal, 34(5): 660-682. https://doi.org/10.1177/0266242615577708
- [26] Chavez, R., Yu, W., Sadiq Jajja, M.S., Lecuna, A., Fynes, B. (2020). Can entrepreneurial orientation improve sustainable development through leveraging internal lean practices?. Business Strategy and the Environment, 29(6): 2211-2225. https://doi.org/BSE-19-0687.R1
- [27] Hattar, C., Batista, L., Mansour, H., Fakoussa, R. (2020). The role of sustainability-oriented innovation in food supply chain: A perspective of HR managers. Paper presented at 7th International EurOMA Sustainable Operations and Supply Chain Forum, Nottingham, United Kingdom.
- [28] Jiang, X., Liu, H., Fey, C., Jiang, F. (2018). Entrepreneurial orientation, network resource acquisition, and firm performance: A network approach. Journal of Business Research, 87: 46-57. https://doi.org/10.1016/j.jbusres.2018.02.021
- [29] Abu-Mater, W., Afifa, M.A., Alghazzawi, M. (2021). The impact of COVID-19 pandemic on small and medium enterprises in Jordan. Journal of Accounting, Finance & Management Strategy, 16(1): 129-150.
- [30] Shqair, M.I., Altarazi, S.A. (2022). Evaluating the status of SMEs in Jordan with respect to industry 4.0: A pilot study. Logistics, 6(4): 69. https://doi.org/10.3390/logistics6040069
- [31] Hitt, M.A., Ireland, R.D., Camp, S.M., Sexton, D.L. (2001). Strategic entrepreneurship: Entrepreneurial strategies for wealth creation. Strategic Management Journal, 22(6-7): 479-491. https://doi.org/10.1002/smj.196
- [32] Al-Saa'da, R.J., Taleb, Y.K.A., Al Abdallat, M.E., Al-Mahasneh, R.A.A., Nimer, N.A., Al-Weshah, G.A. (2013). Supply chain management and its effect on health care service quality: Quantitative evidence from Jordanian private hospitals. Journal of Management and Strategy, 4(2): 42. https://doi.org/10.5430/jms.v4n2p42
- [33] Mercy Corps. (2020). https://www.mercycorps.org/, accessed on May 16, 2022.

- [34] Ministry of Agriculture (MoA). (2018). Annual Statistic Report. http://www.moa.gov.jo/, accessed on May 16, 2022.
- [35] United Nations Development Programme (UNDP). http://www.undp.org/|, accessed on Jul. 04, 2022.
- [36] Mthanti, T., Ojah, K. (2017). Entrepreneurial orientation (EO): Measurement and policy implications of entrepreneurship at the macroeconomic level. Research Policy, 46(4): 724-739. https://doi.org/10.1016/j.respol.2017.01.012
- [37] Sahoo, S., Yadav, S. (2017). Entrepreneurial orientation of SMEs, total quality management and firm performance. Journal of Manufacturing Technology Management, 28(7): 892-912. https://doi.org/10.1108/JMTM-04-2017-0064
- [38] Klewitz, J., Hansen, E.G. (2014). Sustainability-oriented innovation of SMEs: A systematic review. Journal of Cleaner Production, 65: 57-75. https://doi.org/10.1016/j.jclepro.2013.07.017
- [39] Tan, H.X., Yeo, Z., Ng, R., Tjandra, T.B., Song, B. (2015). A sustainability indicator framework for Singapore small and medium-sized manufacturing enterprises. Procedia Cirp, 29: 132-137. https://doi.org/10.1016/j.procir.2015.01.028
- [40] Alghababsheh, M., Gallear, D. (2021). Socially sustainable supply chain management and suppliers' social performance: The role of social capital. Journal of Business Ethics, 173: 855-875. https://doi.org/10.1007/s10551-020-04525-1
- [41] Barney, J.B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. Journal of Management, 27(6): 643-650. https://doi.org/10.1177/014920630102700602
- [42] Paulraj, A. (2011). Understanding the relationships between internal resources and capabilities, sustainable supply management and organizational sustainability. Journal of Supply Chain Management, 47(1): 19-37. https://doi.org/10.1111/j.1745-493X.2010.03212.x
- [43] Priem, R.L., Butler, J.E. (2001). Tautology in the resource-based view and the implications of externally determined resource value: Further comments. Academy of Management Review, 26(1): 57-66. https://doi.org/10.5465/AMR.2001.4011946
- [44] Kiyabo, K., Isaga, N. (2020). Entrepreneurial orientation, competitive advantage, and SMEs' performance: Application of firm growth and personal wealth measures. Journal of Innovation and Entrepreneurship, 9: 1-15. https://doi.org/10.1186/s13731-020-00123-7
- [45] Rasit, Z.A., Zakaria, M., Hashim, M., Ramli, A., Mohamed, M. (2019). Green Supply Chain Management (GSCM) practices for sustainability performance: An empirical evidence of Malaysian SMEs. International Journal of Financial Research, 10(3): 371-379. https://doi.org/10.5430/ijfr.v10n3p371
- [46] Nasip, S., Fabeil, N.F., Buncha, M.R., Hui, J.N.L., Sondoh, S.L., Abd Halim, D.N. (2017). Influence of entrepreneurial orientation and social capital on business performance among women entrepreneurs along west coast Sabah Malaysia. In Proceedings of International Conference on Economics, pp. 377-393.
- [47] Baah, C., Opoku Agyeman, D., Acquah, I.S.K., Agyabeng-Mensah, Y., Afum, E., Issau, K., Ofori, D., Faibil, D. (2022). Effect of information sharing in supply chains: understanding the roles of supply chain visibility,

- agility, collaboration on supply chain performance. Benchmarking: An International Journal, 29(2): 434-455. https://doi.org/10.1108/BIJ-08-2020-0453
- [48] Gold, S., Seuring, S., Beske, P. (2010). Sustainable supply chain management and inter-organizational resources: A literature review. Corporate Social Responsibility and Environmental Management, 17(4): 230-245. https://doi.org/10.1002/csr.207
- [49] Afum, E., Issau, K., Agyabeng-Mensah, Y., Baah, C., Dacosta, E., Essandoh, E., Agyenim Boateng, E. (2023). The missing links of sustainable supply chain management and green radical product innovation between sustainable entrepreneurship orientation and sustainability performance. Journal of Engineering, Design and Technology, 21(1): 167-187. https://doi.org/10.1108/JEDT-05-2021-0267
- [50] Cortes, A.F., Lee, Y., Cortes, J.D., Liñan, I. (2021).. Entrepreneurial orientation in supply chain management: A systematic review. International Journal of Entrepreneurial Knowledge, 9(1): 127-143. https://doi.org/10.37335/ijek.v9i1.127
- [51] Rueda, X., Garrett, R.D., Lambin, E.F. (2017). Corporate investments in supply chain sustainability: Selecting instruments in the agri-food industry. Journal of Cleaner Production, 142: 2480-2492. https://doi.org/10.1016/j.jclepro.2016.11.026
- [52] Wang, J., Zhang, Y., Goh, M. (2018). Moderating the role of firm size in sustainable performance improvement through sustainable supply chain management. Sustainability, 10(5): 1654. https://doi.org/10.3390/su10051654
- [53] Handfield, R., Petersen, K., Cousins, P., Lawson, B. (2009). An organizational entrepreneurship model of supply management integration and performance outcomes. International Journal of Operations & Production Management, 29(2): 100-126. https://doi.org/10.1108/01443570910932011
- [54] Fantazy, K., Tipu, S.A.A. (2019). Exploring the relationships of the culture of competitiveness and knowledge development to sustainable supply chain management and organizational performance. Journal of Enterprise Information Management, 32(6): 936-963. https://doi.org/10.1108/JEIM-06-2018-0129
- [55] Bouguerra, A., Hughes, M., Cakir, M.S., Tatoglu, E. (2023). Linking entrepreneurial orientation to environmental collaboration: A stakeholder theory and evidence from multinational companies in an emerging market. British Journal of Management, 34(1): 487-511. https://doi.org/10.1111/1467-8551.12590
- [56] Deslatte, A., Swann, W.L. (2020). Elucidating the linkages between entrepreneurial orientation and local government sustainability performance. The American Review of Public Administration, 50(1): 92-109. https://doi.org/10.1177/0275074019869376
- [57] Habib, M.A., Bao, Y., Ilmudeen, A. (2020). The impact of green entrepreneurial orientation, market orientation and green supply chain management practices on sustainable firm performance. Cogent Business & Management, 7(1): 1743616. https://doi.org/10.1080/23311975.2020.1743616
- [58] Schumpeter, J.A. (2000). Entrepreneurship as innovation.
  University of Illinois at Urbana-Champaign's Academy
  for Entrepreneurial Leadership Historical Research
  Reference in Entrepreneurship.

- https://ssrn.com/abstract=1512266.
- [59] Abdulaal, A.M., Nordin, N. (2020). The mediating role of creativity on the relationship between knowledge management and human resource management toward innovation performance in the Jordanian smes. International Journal of Industrial Management, 8: 12-18. https://doi.org/10.15282/ijim.8.0.2020.5759
- [60] Al-Abbadi, L.H.M., Almomani, R.Z.Q., Rumman, A.R.A.A.A., Abu-Rumman, A., Khraisat, A.M.I. (2019). Impact of human capital development and human capital isolation mechanisms on innovative performance: Evidence from industrial companies in Jordan. European Journal of Business and Management, 11(15): 200-209. https://doi.org/10.7176/EJBM
- [61] Almomani, R.Z.Q., Al-Abbadi, L.H.M., Rumman, A.R.A.A.A., Abu-Rumman, A., Banyhamdan, K. (2019). Organizational memory, knowledge management, marketing innovation and cost of quality: Empirical effects from construction industry in Jordan. Academy of Entrepreneurship Journal, 25(3): 1-13.
- [62] Wiklund, J., Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. Journal of Business Venturing, 20(1): 71-91. https://doi.org/10.1016/j.jbusvent.2004.01.001
- [63] Meekaewkunchorn, N., Szczepańska-Woszczyna, K., Muangmee, C., Kassakorn, N., Khalid, B. (2021). Entrepreneurial orientation and SME performance: The mediating role of learning orientation. Economics & Sociology, 14(2): 294-312. https://doi.org/10.14254/2071-789X.2021/14-2/16
- [64] Satar, M.S., Natasha, S. (2019). Individual social entrepreneurship orientation: Towards development of a measurement scale. Asia Pacific Journal of Innovation and Entrepreneurship, 13(1): 49-72. https://doi.org/10.1108/apjie-09-2018-0052
- [65] Gupta, A., Chen, J., Gupta, V.K. (2016). Does management °Fs attention to different facets of entrepreneurial orientation create value for the firm? A longitudinal study of large retailer. New England Journal of Entrepreneurship, 19(2): 54-71. https://doi.org/10.1108/NEJE-19-02-2016-B005
- [66] Kropp, F., Lindsay, N.J., Shoham, A. (2008). Entrepreneurial orientation and international entrepreneurial business venture startup. International Journal of Entrepreneurial Behavior & Research, 14(2): 102-117. https://doi.org/10.1108/13552550810863080
- [67] Kosa, A., Mohammad, I., Ajibie, D. (2018). Entrepreneurial orientation and venture performance in Ethiopia: The moderating role of business sector and enterprise location. Journal of Global Entrepreneurship Research, 8: 1-17. https://doi.org/10.1186/s40497-018-0110-x
- [68] Alhnity, H., Mohamad, A., Ishak, A.K. (2016). Impact of entrepreneurial orientation on small business performance: Moderating role of government intervention. International Review of Management and Marketing, 6(7): 95-100.
- [69] Ibidunni, A.S., Ibidunni, O.M., Olokundun, M., Oke, O.A., Ayeni, B., Falola, H.O., Borishade, T. (2018). examining the moderating effect of entrepreneurs' demographic characteristics on strategic demographic characteristics on strategic entrepreneurial orientations and competitiveness of smes. Journal of

- Entrepreneurship Education, 21(1). https://doi.org/1528-2651-21-141
- [70] Masa'deh, R.E., Al-Henzab, J., Tarhini, A., Obeidat, B.Y. (2018). The associations among market orientation, technology orientation, entrepreneurial orientation and organizational performance. Benchmarking: An International Journal, 25(8): 3117-3142. https://doi.org/10.1108/BIJ-02-2017-0024
- [71] Lumpkin, G.T., Dess, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. Academy of management Review, 21(1): 135-172. https://doi.org/10.5465/amr.1996.9602161568
- [72] Mason, M.C., Floreani, J., Miani, S., Beltrame, F., Cappelletto, R. (2015). Understanding the impact of entrepreneurial orientation on SMEs' performance. The role of the financing structure. Procedia Economics and Finance, 23: 1649-1661. https://doi.org/10.1016/s2212-5671(15)00470-0
- [73] Bature, S.W., Sallehuddin, R.M., Rosli, N.A., Saad, S. (2018). Proactiveness, innovativeness and firm performance: The mediating role of organizational capability. Academy of Strategic Management Journal, 17(5): 1-14. https://doi.org/1939-6104-17-5-278
- [74] Al-Jinini, D.K., Dahiyat, S.E., Bontis, N. (2019). Intellectual capital, entrepreneurial orientation, and technical innovation in small and medium-sized enterprises. Knowledge and Process Management, 26(2): 69-85. https://doi.org/10.1002/kpm.1593
- [75] Srivastava, S.K. (2007). Green supply-chain management: A state-of-the-art literature review. International Journal of Management Reviews, 9(1): 53-80. https://doi.org/10.1111/j.1468-2370.2007.00202.x
- [76] Kraus, S., Kauranen, I., Reschke, C.H. (2011). Identification of domains for a new conceptual model of strategic entrepreneurship using the configuration approach. Management Research Review, 34(1): 58-74. https://doi.org/10.1108/01409171111096478
- [77] Petljak, K., Zulauf, K., Štulec, I., Seuring, S., Wagner, R. (2018). Green supply chain management in food retailing: Survey-based evidence in Croatia. Supply Chain Management: An International Journal, 23(1): 1-15. https://doi.org/10.1108/SCM-04-2017-0133
- [78] Anisul Huq, F., Stevenson, M., Zorzini, M. (2014). Social sustainability in developing country suppliers: An exploratory study in the ready made garments industry of Bangladesh. International Journal of Operations & Production Management, 34(5): 610-638. https://doi.org/10.1108/IJOPM-10-2012-0467
- [79] Baah, C., Jin, Z. (2019). Sustainable supply chain management and organizational performance: The intermediary role of competitive advantage. Journal of Management and Sustainability, 9(1): 119. https://doi.org/10.5539/jms.v9n1p119
- [80] Golicic, S.L., Smith, C.D. (2013). A meta-analysis of environmentally sustainable supply chain management practices and firm performance. Journal of Supply Chain Management, 49(2): 78-95. https://doi.org//10.1111/jscm.12006
- [81] Sarkis, J., Zhu, Q., Lai, K.H. (2011). An organizational theoretic review of green supply chain management literature. International Journal of Production Economics, 130(1): 1-15. https://doi.org/10.1016/j.ijpe.2010.11.010
- [82] Lee, R., Jones, O. (2015). Entrepreneurial social capital research: Resolving the structure and agency dualism.

- International Journal of Entrepreneurial Behavior & Research, 21(3): 338-363. https://doi.org/10.1108/IJEBR-02-2014-0025
- [83] Zhu, Q., Sarkis, J., Lai, K.H. (2013). Institutional-based antecedents and performance outcomes of internal and external green supply chain management practices. Journal of Purchasing and Supply Management, 19(2): 106-117. https://doi.org/10.1016/j.pursup.2012.12.001
- [84] Abdellatif, H., Graham, S. (2019). Green supply chain management practices in developing countries—a case study from Jordan. Management, 31: 36. https://doi.org/10.5013/IJSSST.a.20.S1.10
- [85] Alshura, M.S.K., Awawdeh, H.Z.Y. (2016). Green supply chain practices as determinants of achieving green performance of extractive industries in Jordan. International Journal of Business and Social Science, 7(7): 166-177.
- [86] Tibon, M.V.P. (2014). The influence of organizational capabilities on environmental strategies in the restaurant sector: SME experience. International Journal of Entrepreneurship, 18: 113.
- [87] Koka, B. R., Prescott, J.E. (2002). Strategic alliances as social capital: A multidimensional view. Strategic Management Journal, 23(9): 795-816. https://doi.org/10.1002/smj.252
- [88] Machirori, T., Fatoki, O. (2013). The impact of networking on access to debt finance and performance of small and medium enterprises in South Africa. Journal of Economics, 4(2): 97-104. https://doi.org/10.1080/09765239.2013.11884969
- [89] Burge, W.D. (2017). The relationship between the human and social capital characteristics of nascent entrepreneurs and expected job growth in the United States. Doctoral dissertation, The University of Southern Mississippi.
- [90] Junaid, M., Zhang, Q., Syed, M.W. (2022). Effects of sustainable supply chain integration on green innovation and firm performance. Sustainable Production and Consumption, 30: 145-157.

- https://doi.org/10.1016/j.spc.2021.11.031
- [91] Shafique, I., Kalyar, M.N., Mehwish, N. (2021). Organizational ambidexterity, green entrepreneurial orientation, and environmental performance in SMEs context: Examining the moderating role of perceived CSR. Corporate Social Responsibility and Environmental Management, 28(1): 446-456. https://doi.org/10.1002/csr.2060
- [92] Gali, N., Niemand, T., Shaw, E., Hughes, M., Kraus, S., Brem, A. (2020). Social entrepreneurship orientation and company success: The mediating role of social performance. Technological Forecasting and Social Change, 160: 120230. https://doi.org/10.1016/j.techfore.2020.120230
- [93] Alghababsheh, M. (2018). The implementation of socially sustainable supply chain management in the UK manufacturing sector: A social capital perspective. Doctoral dissertation, Brunel University London.
- [94] Thoo, A.C., Abdul Hamid, A.B., Rasli, A., Zhang, D.W. (2014). The moderating effect of enviropreneurship on green supply chain management practices and sustainability performance. In Advanced Materials Research, 869: 773-776.
- [95] Lomberg, C., Urbig, D., Stöckmann, C., Marino, L.D., Dickson, P.H. (2017). Entrepreneurial orientation: The dimensions' shared effects in explaining firm performance. Entrepreneurship Theory and Practice, 41(6): 973-998. https://doi.org/10.1111/etap.12237
- [96] Marshall, D., McCarthy, L., McGrath, P., Claudy, M. (2015). Going above and beyond: how sustainability culture and entrepreneurial orientation drive social sustainability supply chain practice adoption. Supply Chain Management: an International Journal. https://doi.org10.1108/SCM-08-2014-0267
- [97] Serai, M.H., Johl, S.K., Marimuthu, M. (2017). An overview on relationship between corporate entrepreneurship and firm performance. Global Business and Management Research, 9(1s): 428. http://scholars.utp.edu.my/id/eprint/12079.