

Business incubators as a driver of sustainable entrepreneurship development: evidence from the Italian experience

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Abstract

Purpose – This study aims to assess whether and how non-born-sustainable business incubators (BIs) – that is, BIs whose business model was not originally sustainability-oriented – promote sustainable entrepreneurship development.

Design/methodology/approach – The study adopts a qualitative research design based on grounded theory and an interpretive approach. The analysis is developed by collecting interviews with ten Italian BIs, selected by purposive sampling and examining data using the Gioia methodology.

Findings – The results show that BIs, using various specific tools, facilitate the creation of a sustainability-oriented ecosystem. In this context, BIs help start-ups develop a purpose, a cultural mindset and business models that enable them to face the challenges of today's competitive environment, in which sustainability has become (and will increasingly be) an essential requirement for companies.

Research limitations/implications – This study contributes to the literature by highlighting the active role of non-born-sustainable BIs in promoting the development of sustainable entrepreneurship.

Practical implications – This research has practical implications related to the opportunities for embedding sustainability in BIs' purpose and defining a framework of operations and practices that can boost innovativeness while having a positive impact on the community and on the environment. Finally, findings suggest that BIs can foster cost reduction when implementing sustainability in start-ups.

Social implications – The study suggests that BIs, as drivers of social change, could be sustained by public assistance and help from well-established firms to promote the spread of sustainable entrepreneurship culture and the success of sustainability-oriented start-ups.

Originality/value – BIs have the potential to promote sustainable entrepreneurship, but this topic is still under-researched. While existing studies have examined the role of born-sustainable BIs in specific business sectors, this research is one of the first attempts to explore the role of non-born-sustainable BIs in fostering sustainable entrepreneurship.

Keywords Business incubators, Sustainable entrepreneurship, Innovative start-up, Financial support, Funding gap, Networking services, Entrepreneurship development, Training programs

Paper type Research paper

1. Introduction

Over the last two decades, the debate about sustainable development and the contribution of corporations to sustainability has dramatically increased and involved different aspects of management (e.g. Engert *et al.*, 2016; Martínez-Jurado and Moyano-Fuentes, 2014; Martins *et al.*, 2019; Williams *et al.*, 2017), including business models, sustainable strategies, creation of new forms of business, operation management and accountability. The United Nations Agenda 2030 (United Nations, 2015) urges corporations to contribute to sustainable



development by innovating their practices in terms of the reduction of environmental impact and promotion of human development (e.g. [Carpentier and Braun, 2020](#); [van der Waal et al., 2021](#); [Van Tulder et al., 2021](#)). In addition to this, recent social, political and economic crises – such as those caused by financial shocks in 2008, the coronavirus disease 2019 (COVID-19) pandemic in 2020, and the Russia–Ukraine war in 2022 — demonstrated that traditional forms of business focused only on profit-seeking are no longer capable of responding to social expectations and promoting affordable long-term corporate strategies.

In addition to their traditional role as profit-makers, contemporary firms embrace new goals that contribute to their overall purpose (e.g. [Porter and Kramer, 2011](#); [Sabeti, 2011](#)). In this sense, scholars have observed a shift in thinking regarding the generation of profit as being the firm's unique purpose to profit becoming a means of achieving a broad social mission ([Mion et al., 2021](#)). This comingling of financial and social/environmental goals has resulted in some scholars defining such firms as “hybrid” (e.g. [Battilana et al., 2012](#); [Battilana and Lee, 2014](#); [Haigh et al., 2015](#)), even though this extension of the narrow boundaries of profit as the unique goal not only concerns new forms of business, such as benefit corporations or social enterprises, but also involves a large number of other firms. The tension inherent in sustainability as a blended purpose has become a characteristic of contemporary business ([Bonfanti et al., 2023](#)), and the awareness of entrepreneurial responsibilities toward society and the environment has grown in both research and practice ([Vallaster et al., 2019](#)).

Scholarly attention to sustainable entrepreneurship has increased, and this trend has been well-received by the top-ranked journals ([Muñoz and Cohen, 2018](#); [Terán-Yépez et al., 2020](#); [Rosário et al., 2022](#)). Sustainable entrepreneurship focuses on “solving societal and environmental problems through the realization of a successful business” ([Schaltegger and Wagner, 2011](#), p. 224). In contrast to other forms of socially oriented entrepreneurship – such as ecopreneurship, social entrepreneurship or institutional entrepreneurship – in sustainable entrepreneurship, the transformative capacity of business is centered on corporate activities ([Schaltegger and Wagner, 2011](#), p. 224), and profit is simultaneously a means and a goal of business. Furthermore, sustainable entrepreneurship focuses on entrepreneurial competencies, attitudes and values that form (or transform) the firm according to a sustainable business model.

This study focuses on the development of sustainable business that literature links to different starting points and contextual characteristics: if the intrinsic motivations of entrepreneurs are considered crucial ([Schaper, 2010](#)), such as the entrepreneurial vision of market evolution and profit opportunities ([Dean and McMullen, 2007](#)), other drivers affect the creation of firms devoted to social and environmental goals in combination with financial ones ([Vallaster et al., 2019](#)). The literature on entrepreneurship has long recognized that sustainable entrepreneurial skills manifest themselves during the start-up phase of the development of firms. Nonetheless, among the different contextual factors that affect the willingness to develop a sustainable business, little attention has been given to the capacity of business incubators (BIs) to support and encourage sustainable entrepreneurship during the first steps of business development. Starting from this gap in the literature, the study focuses on the start-up phase of sustainable business development and, in detail, on the contributions of BIs to this process.

Indeed, during the incubation phase, start-ups are supported in their institutional and strategic evolution by different services provided by BIs. A definition of a BI that is well-established in the literature is a “shared office space facility that seeks to provide its incubatees [...] with a strategic, value-adding intervention system (i.e. business incubation) of monitoring and business assistance” ([Hackett and Dilts, 2004](#), p. 57). Nonetheless, as reviewed by [Hackett and Dilts \(2004\)](#), BIs do not limit themselves to offering only spaces or specific services but are networks of people and organizations that create an ecosystem of skills that favor the growth of new business. In these environments, new entrepreneurs can find opportunities to develop their business vision, including sustainability-related opportunities, and they find opportunities to develop their projects with the help of sustainability-oriented

finance. The orientation toward social impact is one of the elements able to influence the matching between firms and funders (Theodoraki *et al.*, 2022; Haider Alvi and Ulrich, 2023). Consequently, sustainable finance instruments have been gaining increasing importance. More precisely, within sustainable finance, the impact-investing phenomenon becomes relevant, since it involves providing financial resources for a financial return while simultaneously aiming for non-financial benefits, thus creating both social and environmental impact (Shome *et al.*, 2023). In this sense, impact investing differs from grant funding and philanthropy since it requires financial returns, and from traditional investments without explicit and intentional non-financial goals (Höchstädter and Scheck, 2015).

To the best of the authors' knowledge, no studies have investigated the role of BIs in developing sustainable entrepreneurship by providing support during the different phases of business development, such as formulating business ideas, building the business model and finding financial resources. Some scholars have focused on the role of born-sustainable BIs (among others, see Bhat, 2023; Hackett and Dilts, 2004). However, there is a lack of research on the contribution to sustainable entrepreneurship of non-born-sustainable BIs – that is, those that were not “originally conceived to develop a new business model leveraging sustainability at its core” (Todeschini *et al.*, 2017, p. 765). Given these premises, this study intends to improve our understanding of non-born-sustainable BIs in promoting sustainable entrepreneurship. Specifically, this study intends to respond to the following research question: *What is the role of non-born-sustainable BIs in contributing to the development of sustainable entrepreneurship?* To do this, the study adopts a qualitative research design based on grounded theory by implementing an interpretive approach drawn from the so-called Gioia method (Gioia *et al.*, 2013; Magnani and Gioia, 2023).

In considering the perspectives of BIs, this study aims to contribute to the debate on sustainable entrepreneurship by improving our understanding of non-born-sustainable BIs in promoting sustainable entrepreneurship and, more precisely, by understanding if and how non-born-sustainable BIs support and encourage sustainable entrepreneurship development. To do this, the study applies a qualitative method based on the analysis of interviews conducted with ten Italian BIs.

The remainder of this paper is organized as follows: first, three main streams of prior literature necessary to understand the proposed conceptual framework are investigated: research on sustainable entrepreneurship, start-ups and BIs. Second, the research methodology is described, and the study's main findings are presented. Finally, the findings are discussed in the light of previous literature, theoretical and practical implications are shown, and, in the conclusive section, the limitations of the research and further research lines are presented.

2. Literature review

2.1 Sustainable entrepreneurship

Over the last few decades, increasing attention has been devoted to the definition of sustainable entrepreneurship, and entrepreneurial strategies aimed at influencing society and the environment are becoming even more important (Muñoz and Cohen, 2018; Sarma *et al.*, 2024). Sustainable entrepreneurs are constantly challenged to disseminate new solutions to create positive ecological and social impacts (Schaltegger and Wagner, 2011; Lüdeke-Freund, 2020). The debate on the relationship with corporate social responsibility (e.g. Rosário and Figueiredo, 2024), as well as on antecedents and results gained thanks to the diffusion of sustainable entrepreneurship (e.g. Jha and Pande, 2024), is broad. Prior research has revealed “resilience capability, prior knowledge, motivation, cognitive properties, personality traits, social networks and entrepreneurial alertness” as critical factors influencing sustainable opportunity recognition (Sarma *et al.*, 2024).

Based on a system perspective, sustainable entrepreneurs must be considered embedded within their sociotechnical contexts, in which stakeholders, public policies and private

financing affect how sustainable business models can be run (Lüdeke-Freund, 2020). The role of private funding relates to the innovation cycle since “innovation increases the complexity of firm-funder matching” (Haider Alvi and Ulrich, 2023, p. 1), and private investors are more interested in mature sustainability innovations (Wüstenhagen and Menichetti, 2012). Thus, a mismatch exists between social impact businesses’ financial needs and market capitalism’s traditional institutions (Thompson *et al.*, 2018). Sustainable finance and impact investing, commonly used in related ways, represent dedicated fundraising channels for fostering sustainable entrepreneurship (Cunha *et al.*, 2021; Singhanian *et al.*, 2023).

2.2 Start-ups

Even though sustainable entrepreneurship should not be exclusively linked to new ventures, prior literature has recognized that sustainable entrepreneurial skills manifest themselves during the start-up phase of the firms’ development path (e.g. Di Vaio *et al.*, 2022; Jha and Pande, 2024). Integrating sustainability into business strategy and activities requires achieving simultaneous economic, social, and environmental results, which implies higher complexity and increased risks (Muñoz and Cohen, 2018). Changes in the ecological environment and social context have been proven to significantly influence start-up strategies, and some external factors, such as government subsidies, financial assistance, access to online banking and credit lines, and availability of digital platforms, are considered crucial for their survival (Sarma *et al.*, 2024). In particular, sustainable entrepreneurs, especially in the early development phase, need ecosystems that diverge from the traditional ones, and in this sense, national boundaries are highly relevant, leading to the definition of national ecosystems (Jha and Pande, 2024). BIs have been highlighted as playing a key role during the incubation phase of a start-up, where the different services provided by the BI support the start-up’s institutional and strategic evolution (Albort-Morant and Oghazi, 2016; Hausberg and Korreck, 2020; De Esteban Escobar *et al.*, 2022). Some scholars have also investigated the role played by BIs to support and encourage sustainable entrepreneurship during the first steps of business development (Paoloni and Modaffari, 2022; Deyanova *et al.*, 2022).

2.3 Business incubators

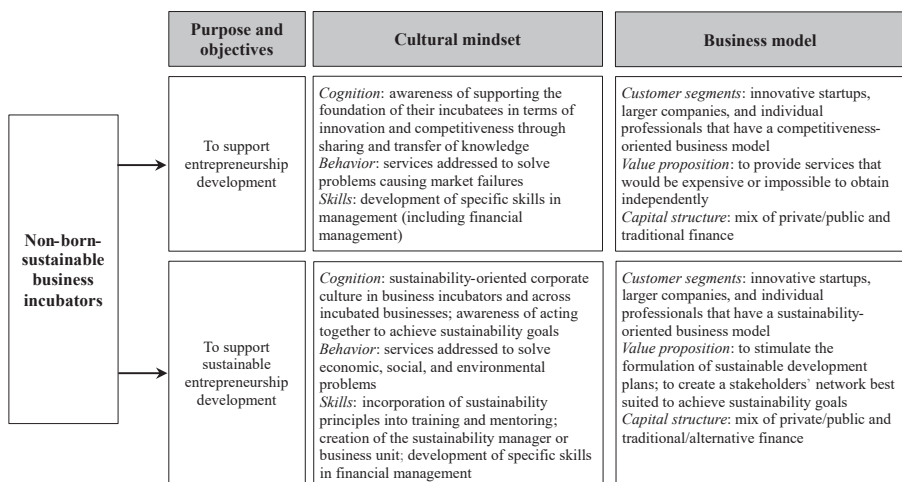
As identified in the literature review by Hackett and Dilts (2004), scholarly attention to BIs began around 40 years ago, when the contribution of BIs to business development was presented in the seminal work of Merrifield (1987). Previous studies have defined a BI as combining structural/functional elements (shared offices, services provided to start-ups) with relational elements (network of competences).

BIs stimulate entrepreneurship, innovation and competitiveness (Mian, 1996; Autio and Klofsten, 1998; Aerts *et al.*, 2007; Colombelli *et al.*, 2019; Seno Wulung *et al.*, 2018) by supporting the foundation and early-stage development of new businesses such as micro- and small firms as well as start-ups (Hausberg and Korreck, 2020). A BI’s organizational goal is to provide shared infrastructure and facilities (e.g. office space), training, technical management, operational know-how, access to finance (e.g. seed capital resources or business angels), legal advice, assistance in accessing new markets and networking opportunities (e.g. Aernoudt, 2004; Apa *et al.*, 2017; Bruneel *et al.*, 2012; Grilli and Marzano, 2023; Hackett and Dilts, 2004; Hahn *et al.*, 2019; Karatas-Ozkan *et al.*, 2005; Marvel and Lumpkin, 2007; Mas-Verdú *et al.*, 2015) to budding entrepreneurs with innovative business ideas.

The development of BIs has encouraged scholars to consider the institutional and functional characteristics of these organizations, including their mission, scope, objectives, sectors involved, value-added, location, incubation period, phase of intervention, sources of revenue, services, management team and type of technology (Allen and McCluskey, 1991; Aernoudt, 2004; Becker and Gassmann, 2006; Grimaldi and Grandi, 2005; Von Zedtwitz, 2003; Von Zedtwitz and Grimaldi, 2006). BIs are heterogeneous and previous studies, such as that of Aernoudt (2004), identified different types of BIs (mixed BIs, economic development

BIs, technology BIs, social BIs and basic research BIs) based on their main philosophy (which type of gap BIs want to fill: economic, social, etc.), their objectives and their sector. Furthermore, [Barbero and colleagues \(2014\)](#) argued that “not all incubators are equal and that there are different types with significant differences” ([Barbero et al., 2014](#), p. 152) by summarizing in their study the types of incubators (basic research BIs, economic development BIs, university BIs and private BIs) derived from both the academic literature and national legislation.

Two main objectives of BIs emerge from previous studies. As schematized in [Figure 1](#), on the one hand, BIs aim to solve problems causing market failures ([Bøllingtoft and Ulhøi, 2005](#)) by supporting entrepreneurial development. In this regard, BIs attempt to create support mechanisms in a safe environment for the businesses supported (named incubatees or tenant companies or recipients) to increase their opportunities for survival, accelerate their economic growth and develop their financial performance ([Barbero et al., 2014](#); [Mian, 1996](#); [Mian et al., 2016](#); [Mungila Hillemane et al., 2019](#); [Neumeyer, 2020](#); [Schwartz and Hornych, 2012](#)). In other words, they try to equip their incubatees by combining technology, capital, professionalism and entrepreneurial experience (e.g. [Aernoudt, 2004](#); [Aerts et al., 2007](#); [Grimaldi and Grandi, 2005](#); [Mian et al., 2016](#)), promoting management and innovative culture and skills, and providing access to financial resources (e.g. [Allen and McCluskey, 1991](#); [Barbero et al., 2014](#); [Hackett and Dilts, 2004](#); [Mas-Verdú et al., 2015](#)). Thus, they invest in the commercialization process that transforms innovation into high-growth businesses ([Aarikka-Stenroos and Lehtimäki, 2014](#)). Previous studies have examined the initiatives and practices that BIs undertake to support start-ups (e.g. [Barbero et al., 2014](#); [Bergek and Norrman, 2008](#); [Clausen and Korneliusen, 2012](#); [Hernández and Carrà, 2016](#); [Scillitoe and Chakrabarti, 2010](#)), such as knowledge sharing and technology transfer, which are at the core of the activity of each BI (e.g. [Balle et al., 2019](#); [Crupi et al., 2022](#); [Fischer et al., 2021](#)). In addition, different scholars have focused on BIs’ performance assessment and effectiveness to evaluate their ability to provide services to their incubatees ([Allen and McCluskey, 1991](#); [Chan and Lau, 2005](#); [Games et al., 2021](#); [Grimaldi and Grandi, 2005](#); [Lukeš et al., 2019](#); [Messeghem et al., 2018](#); [Stephens and Onofrei, 2012](#); [Voisey et al., 2006](#)). According to [Barbero and colleagues \(2014\)](#), BIs’ effectiveness is strongly linked to their specific objective of strategic action.



Source(s): Authors’ own work

Figure 1. Non-born-sustainable business incubators: Purpose, cultural mindset, and business model

On the other hand (see [Figure 1](#)), some BIs aim to solve social and environmental problems (e.g. [Bhat, 2023](#); [Hackett and Dilts, 2004](#)) by developing sustainable entrepreneurship to address social and environmental needs. Pursuing sustainable entrepreneurship means that entrepreneurs transcend mere profit generation to contribute to improving both their society and environmental stewardship and, thus, to ensure the well-being of future generations (e.g. [Anand et al., 2021](#); [Bertello et al., 2022](#); [Muñoz and Cohen, 2018](#)). Two primary forms of these BIs have been examined in the literature: social and sustainability-oriented incubators. Social incubators pursue a social mission to support entrepreneurs who aim to produce a positive social impact (e.g. [Aernoudt, 2004](#); [Galbraith et al., 2019](#); [Nicolopoulou et al., 2017](#); [Sansone et al., 2020](#); [Sonne, 2012](#)) by investing in innovation and networking ([Battisti, 2019](#); [Casasnovas and Bruno, 2013](#); [Nicolopoulou et al., 2017](#); [Pandey et al., 2017](#); [Sonne, 2012](#)). Sustainability-oriented incubators support entrepreneurs who aim to reduce or reverse negative social and environmental impact (e.g. [Bank and Kanda, 2016](#); [Bank et al., 2017](#); [Millette et al., 2020](#); [Sansone et al., 2020](#)) by striving to solve the specific problems identified by the United Nations as necessary to achieve the Sustainable Development Goals (SDGs).

Past research has investigated the social or sustainable nature of donors. However, to the best of the authors' knowledge, very few studies have focused on non-born-sustainable BIs to understand whether they support sustainable entrepreneurs in contributing to achieving the SDGs. For example, [Azevedo Fonseca and Chiappetta Jabbour \(2012\)](#) proposed a framework for evaluating the greening of BIs, comprising the seven following variables – green buildings and facilities, green screening processes, environmental training and awareness, energy management, water resource management, promoting green management and tenants with green activity – revealing that these incubators are at different levels of environmental maturity and evolve from the environmental omission stage to the environmental leadership stage. [Tiba et al. \(2020\)](#) analyzed sustainability-oriented entrepreneurial ecosystems (i.e. regions of start-up activity) and found that the sustainability orientation of successful start-ups contributes to shaping the cultural, social and material attributes of an entrepreneurial ecosystem and acts as an accelerator of sustainability. [Klofsten and colleagues \(2020\)](#) explored sustainability specialization among incubators. They found that this is positively associated with incubator size, and that tenants do not have green, sustainable or environmentally friendly products and services as their core business. [Lamperti and colleagues \(2023\)](#) highlighted that incubation programs that transfer explicit and tacit knowledge foster sustainable development of start-ups during three main phases: awareness, identification and assessment.

Bearing in mind that different types of funding are needed alongside the innovation and sustainable cycle, since private investors tend to be scarce in the pre-commercial phase when risks are higher ([Wüstenhagen and Menichetti, 2012](#)), BIs should be considered “impact-oriented support organizations” ([Roundy, 2020](#), p. 476), providing mentorship, office space and financial support to ventures oriented toward sustainability. Nevertheless, the role played by BIs within the impact-investing ecosystem ([Roundy, 2020](#); [Christopoulos et al., 2023](#)) and sustainable entrepreneurial ecosystem ([DiVito and Ingen-Housz, 2021](#)) has not been thoroughly considered. In defining the leading players in the sustainable finance field, [Cunha and colleagues \(2021\)](#) underlined the relevance of the supply side (suppliers of services, resources and investments able to foster sustainable projects and business). Still, no mention of the role played by BIs has been reported.

3. Methodology

3.1 Sampling and data collection

This study applies a qualitative method based on grounded theory ([Glaser and Strauss, 1967](#); [Strauss and Corbin, 1998](#)) to gain a deeper understanding of the role of BIs in the development of sustainable entrepreneurship and its promotion through the attraction of sustainability-oriented funding. In particular, an interpretive approach was adopted to balance the need for inductive concept development with systematic and rigorous analysis ([Gioia et al., 2013](#);

[Magnani and Gioia, 2023](#)). A purposive sampling approach was used to identify respondents who could provide an informed “insider” view of BIs.

Italian BIs are registered in an official national database managed by the Ministry of Industry and Made in Italy. This official national database, which included 62 certified BIs in January 2024, is the most reliable source to identify the population under investigation and possible respondents for our study. To be certified in accordance with Decree-Law 179/2012, Article 25 (paragraph 5), a BI must be a public limited company, which may also take the form of a cooperative, have its registered office in Italy, and meet the five following requirements: (1) having adequate facilities for innovative start-ups, such as reserved spaces for the installation of testing, inspection or research equipment; (2) having equipment suitable for the activities of innovative start-ups, such as ultra-broadband Internet access systems, meeting rooms, and machines for testing, trials or prototypes; (3) being led or managed by individuals with recognized expertise in business and innovation and having a permanent technical and business advisory structure; (4) having regular relationships with universities, research centers, public institutions and financial partners that conduct activities and projects related to innovative start-ups; and (5) having an adequate and proven experience in supporting innovative start-ups.

Of the 62 registered BIs, seven were born sustainable, leaving 55 non-born-sustainable incubators that represent the population under investigation. Those who had a public email address (52) were contacted via email, informed of the aim of the research, and were asked to participate in the study, either by answering an open-ended questionnaire via an online link or by participating in an online interview with one of the researchers, depending on each respondent’s preference. The questionnaire is presented in the [appendix](#) of this study. The anonymity and confidentiality of their responses were guaranteed. A second callback was sent two weeks after the first email. Our final sample comprises ten BIs who responded to our invitation and participated in the study, with a response rate of about 19%.

Although there is no fixed sample size in qualitative research, some scholars have attempted to quantify the minimum number of interviews to reach theoretical saturation. For example, [Kuzel \(1992\)](#) suggested that six to eight participants are likely sufficient in a homogeneous population. [Guest et al. \(2006\)](#) found that essential elements for meta-themes emerged after six in-depth interviews and that saturation was reached at 12 in-depth interviews. Other researchers maintain that several criteria should be used to define the sample size. For example, [Morse \(2000, p. 3\)](#) recommends considering various factors, including the scope of the study, the nature of the topic, and the quality of the data. A broader scope, an elusive topic and low data quality require larger samples. The scope and nature of this study are focused on a specific topic, and the informants were carefully selected to ensure they were knowledgeable about it. Some respondents were available for follow-up questions after the first interview. In addition, the population of BIs eligible for this research is relatively homogeneous since all BIs must meet specific requirements to be admitted to the national register. The final sample of study participants (10 out of 55 non-born-sustainable BIs) represents about 18% of the Italian population of BIs. This sample size is in line with recent research conducted in similar contexts ([Kulkov, 2023](#)). Thus, the sample size of this study can be regarded as adequate to respond to the research question. [Table 1](#) summarizes the profile of the interviewees.

3.2 Interview protocol and data analysis

Prior to conducting the interviews, the interview protocol, developed based on the literature analysis, was carefully reviewed to ensure that it focused on the research question, was thorough and did not contain any leading questions ([Gioia et al., 2013, p. 19](#)). The interview protocol encompassed some closed-end questions regarding personal information about each BI (e.g. year of foundation, ownership and location) and some open-ended questions addressing the core topic of this study (e.g. do you stimulate incubated companies to formulate

Table 1. The respondents' profile

Respondent	Year of foundation	Ownership of the incubator	Geographical area in Italy	Location (single or multiple)	Dimensional class (net capital in €)	Generation of the incubator (Bruneel <i>et al.</i> , 2012)	Role of the respondent in the business incubator
1	1999	Public	Center	Single	>5,000,000	Third	Start-up area manager
2	2015	Private (non-financial)	Southern	Multiple	10,000–50,000	Third	Start-up and CRM specialist
3	2020	Private (financial)	Southern	Single	5,000–10,000	Second	CFO
4	2014	Local administration	North-Eastern	Single	250,000–500,000	Third	General manager
5	2002	mixed	North-Eastern	Multiple	1,000,000–2,500,000	Third	General manager
6	2019	Private (non-financial)	Center	Multiple	500,000–1,000,000	Second	Manager
7	2019	Private (financial)	North-Western	Multiple	100,000–250,000	Third	Head of institutional relations and public affairs
8	1999	Mixed	North-Western	Single	1,000,000–2,500,000	Third	Operations manager
9	2020	Private (non-financial)	Southern	Single	10,000–50,000	Third	CEO and founder
10	2003	Private (financial)	North-Western	Multiple	>5,000,000	Third	CEO

Source(s): Authors' own work

sustainability-oriented development plans? What actions do you take to encourage sustainable business behavior? Do you use any specific tools to guide incubated companies in this direction? Would you consider using traditional or alternative finance (e.g. a crowdfunding campaign) to find financial resources? Why?).

Regarding data analysis, Gioia *et al.* (2013) emphasize the importance of “giving voice” to informants. To this end, the interviewees’ responses (provided by answering the online questionnaire or transcribed after the one-to-one interview) formed the data corpus. Informants’ voices were coded in first-order concepts, then summarized in second-order themes, and finally in aggregate dimensions, as recommended by Gioia’s methodology (Gioia *et al.*, 2013). In the first-order analysis, the researchers attempted to adhere strictly to the terms used by the informants and look for similarities to reduce the number of categories emerging from the analysis. In the second-order analysis, the researchers identified the concepts that had not been previously addressed in the literature on BIs. This analysis involved an iterative process, constantly switching between the data and existing theory to determine whether new concepts had been discovered. Next, the second-order themes were distilled into a narrower set of aggregated dimensions (Magnani and Gioia, 2023). Direct quotes are reproduced in the results to reflect the voices of the informants. To increase the transparency of the data analysis (Cloutier and Ravasi, 2021), the data structure with examples of direct quotations, first-order concepts, second-order themes and aggregate dimensions (Magnani and Gioia, 2023) is reported in Table 2.

4. Findings

The non-born-sustainable BIs investigated for this study highlight that they nurture virtuous entrepreneurial dynamics regarding competitiveness and sustainability. Figure 1 shows that their purpose and objectives, cultural mindsets and business models are set to support entrepreneurship and the development of sustainable entrepreneurship. These dimensions are closely connected, so their presentation in separate blocks is only for greater clarity.

This section presents the results of the study. The analyses provide evidence of the BIs’ purpose and objectives, cultural mindsets and business models, and reveal that BIs, using various specific tools, contribute to facilitating the creation of a sustainability-oriented ecosystem.

4.1 The purpose and objectives of non-born-sustainable business incubators

All the BIs examined aim to accelerate the process of transforming an idea into an existing business to generate profit and help their incubatees develop new ideas and grow. In other terms, their purpose consists of supporting entrepreneurship development, as the following interviewees said:

We aim to provide young start-uppers and innovators opportunities for growth and entrepreneurial training, enhancing their talent and creativity, also connecting them to our network partners.

We are an incubator of potential entrepreneurs and, therefore, of entrepreneurial ideas, and offer tools, skills, and resources to verify their technological, commercial, and economic feasibility. We are an incubator of innovative companies to which we offer services and support for project management, the development of technology studies, the improvement of products (reduction of time and costs), the identification of financing instruments, and much more.

However, the analysis reveals that some BIs aim to achieve objectives that are not solely profit-driven and are directed at solving problems causing market failures. Indeed, almost all survey respondents are guided by a purpose that leads to sustainable entrepreneurship development, i.e. to solve economic, social and environmental problems. Thus, they aim to act sustainably while stimulating sustainable business behaviors across their incubatees, as these interviewees argued:

The incubator wants to become a recognized leader in innovation and knowledge transfer, contributing to economic and sustainable growth and improving the quality of life.

Table 2. Data structure

Example quotations	First-order concepts	Second-order themes	Aggregate dimensions
<i>“We aim to provide . . . opportunities for growth and entrepreneurial training”</i>	To offer start-ups opportunities, knowledge and tools for growth	Entrepreneurship development	Purpose and objectives
<i>“We offer services and support”</i>			
<i>“We encourage our incubated business to carry out a path of sustainability certification”</i>	To promote environmental sustainability	Sustainable entrepreneurship development	
<i>“Giving back to the community part of what is received”</i>	To promote social sustainability		
<i>“Contributing to economic and sustainable growth and improving the quality of life”</i>			
<i>“Promoting an environment where sustainability is valued and encouraged”</i>	Sharing and transferring of knowledge to create a sustainable corporate culture among incubates	Cognition	Cultural mindset
<i>“Helping them to protect intellectual property, validate their business model [...] and intercept [...] funding”</i>	Support incubates with problem-solving services (e.g. assistance in developing the business model and networking)	Behavior	
<i>“Through workshops, seminars, and mentoring programs, start-ups are provided with the skills needed”</i>	Transfer the skills through training and mentoring activities	Skills	
<i>“We focus on those (customers) who orient their business model to ESG requirements”</i>	Start-ups, larger companies, individual professionals	Customer segments	Business model
<i>“Providing a structured and supported environment that can facilitate sustainable growth and reduce the likelihood of failure”</i>	Offering unique services that start-ups could not afford	Value proposition	
<i>“The incubator will provide support in securing funding”</i>	Mixed funding sources to pursue innovation and sustainability	Capital structure	
<i>“Assistance in obtaining funding, either through direct investments or by facilitating connections with external investors”</i>			

Source(s): Authors’ own work

We encourage our incubated businesses to carry out a path of sustainability certification (e.g. ISO 14001) and circular economy.

Although not all the BIs examined have already taken a sustainability path, assuming and stimulating sustainable business behaviors in the field of incubation has become, and is becoming an increasingly important aspect. Different strategies and specific tools are used to ensure that incubated businesses implement sustainable practices from their early stages, such as the inclusion of sustainability values into training and mentoring and the development of a sustainable corporate culture.

4.2 Cultural mindsets developed by non-born-sustainable business incubators

The BIs investigated in this study highlight that both entrepreneurship and sustainable entrepreneurship development are part of their cultural mindsets. This result emerges from the

analysis considering the three subdimensions of their cultural mindsets, i.e. cognition, behaviors and skills.

Regarding cognition, all the BIs are conscious of their essential role in supporting their incubatees in terms of developing their innovation, entrepreneurship and competitiveness. However, only some have developed the idea of sustaining their growth and accelerating their development. The sharing and transfer of knowledge is at the core of their activity. In almost every BI, a sustainability-oriented corporate culture is developed. In this regard, many interviewees reported that they generate a sustainability report, resulting from a widespread awareness of sustainable principles within each BI.

Some BIs strive to create a sustainable corporate culture across their incubatees by encouraging start-ups to think sustainably in all their daily business practices, as this interviewee argued:

We are committed to shaping this culture, providing an example through operational and decisional practices, and promoting an environment where sustainability is valued and encouraged.

With respect to the behavioral subdimension, the incubators considered in this study are (pro) actively organized to support their incubatees with services that aim to solve problems causing market failures, as well as economic, social and environmental issues. They help the development of entrepreneurship within new start-ups by providing the following services: managerial support (e.g. assistance in the drafting of the business plan and the establishment of the business, development of the business model, mentoring and networking with other companies and investors, and support for the implementation of marketing and internationalization strategies); access to physical workspaces, laboratories and IT equipment; entrepreneurial and managerial training; and funding searches with an introduction to good practice in dialogue with investors and partners. However, only some of these BIs provide their incubatees with opportunities for assistance at the administrative, legal and intellectual property-management levels. These services are further delivered in the sustainability field by the incubators that invest in dedicated resources to enable their incubatees to enter sustainability pathways, as an interviewee explained:

Several of our incubated start-ups deal with sustainability. We try to meet their demands by helping them to protect intellectual property, validate their business model in the market, and intercept both public and private funding.

Regarding the skills subdimension, the BIs support their incubatees in their choices and answer their questions using specific skills developed internally in different management fields, such as innovation, marketing, administration and finance (especially with reference to the capital structure decision-making process). Further skills connected to sustainable entrepreneurship development are provided during entrepreneurial and managerial training and mentoring, as this interviewee said:

We incorporate sustainability principles into training and mentoring. This includes training entrepreneurs on environmental impact, social sustainability, and corporate social responsibility. Through workshops, seminars, and mentoring programs, start-ups are provided with the skills needed to integrate sustainable practices into their business model.

As previously pointed out, sustainability orientation also implies a modification of the business's financial needs and an increased funding gap. Consequently, within the financial-management skills training, the effort is directed toward the development of sustainable entrepreneurship, making incubatees aware of the potential of new fundraising channels such as crowdfunding campaigns. An interviewee clearly explains this potential:

Crowdfunding, in addition to providing access to capital needed for growth, produces many other benefits: it also provides a platform to test demand further and receive direct feedback from consumers. It can also act as a marketing tool, thus increasing product visibility and strengthening the brand. It represents a powerful message to communicate either to future investors and partners.

In recent years, the importance and development of sustainability have led one of the incubators to create a sustainability manager position and a sustainability business unit, which provides know-how and offers opportunities for exchanging experiences among start-ups incubated in the sustainability field.

4.3 *The business model of non-born-sustainable business incubators*

The business models of non-born-sustainable BIs are widely oriented to entrepreneurship and innovation – and thus competitiveness, simultaneously and sustainability. The analysis of each pillar of these business models highlights this twofold direction. The components, including customer segment, value proposition and capital structure, shed light on their orientation toward the development of sustainable entrepreneurship.

With respect to their customer segments, the BIs examined target multiple types of businesses with specific characteristics. Fundamentally, they all target start-ups, especially those at an early stage. At the same time, only a limited number are aimed at larger companies and, to a lesser extent, individual professionals. Specifically, BIs are open to incubating businesses that propose an innovative (and technological) business idea, are driven by someone with a strong inclination and positive attitude toward entrepreneurship, have business values aligned with those of the BI, and present a competent dynamic, qualified, well-structured and cohesive team. At the same time, the non-born-sustainable BIs examined welcomed start-ups whose business ideas will have a positive impact not only on the market but also on sustainability, and therefore have a sustainability-oriented business model. In this regard, two interviewees from different BIs stated:

We evaluate the impact of the idea on the market and the business plan (if any) about the innovative idea in terms of sustainability.

In addition to know-how, market, and territorial affinity, we focus on those who orient their business model to ESG [environmental, social, and governance] requirements.

Concerning the value proposition of their business models, BIs provide unique services, especially to start-ups at an early stage, which would be expensive or impossible to obtain independently, as noted by several interviewees. A clear and complete synthesis of the testimonies collected during the various interviews is summarized in the words of this interviewee:

BIs are a fundamental strategic choice for start-ups at an early stage for several reasons. They provide access to vital resources and infrastructure such as office spaces, laboratories, and technical equipment. They offer professional mentorship and support, providing experts and mentors in areas such as business strategy, marketing, finance, legal, and product development. Another significant benefit is the networking and connections that an incubator can provide. This is crucial, as it gives start-ups the opportunity to connect with other entrepreneurs, potential investors, customers, partners, and networks that can be decisive for long-term success. Finally, incubators help start-ups reduce the risks associated with starting a business by providing a structured and supported environment that can facilitate sustainable growth and reduce the likelihood of failure.

Almost all the BIs investigated encourage their incubatees to formulate sustainable development plans, as this interviewee explained:

We actively underline our commitment to ESG topics, which have always been an integral part of the business model and of the business management. We pursue business objectives, favoring a development model based on solidarity and social ties, networking resources and skills, and we experiment with innovative solutions able not only to renew the industrial fabric but also to generate positive social and environmental impacts.

The capital structure of the BIs must be considered a pillar of their business model. Efforts toward innovation and sustainability are supported using a mix of funding sources, both public and private, on the one hand, and traditional and alternative, on the other. Some incubators evidence a more

diversified mix of funding sources. Bearing in mind that this study focused on the non-born-sustainable BIs, from the interviews, it emerged that none of the analyzed BIs reported using sustainability-oriented sources of funding, but one expressly cited Environmental, Social and Governance (ESG) principles when referring to their relationship with investors.

4.4 Toward the creation of a sustainability-oriented ecosystem in support of sustainable entrepreneurship development

The BIs examined in this study highlight that they are not able to support the development of sustainable entrepreneurship alone. As mentioned above, they adopt strategies and tools to guarantee that incubated businesses implement sustainable practices. It is fundamental for them to create partnerships with other organizations that promote sustainability, as the following interviewee said:

Environmental sustainability and social responsibility are perceived and pursued in a logic of giving back to the community as part of what is received. With this approach, we intend to positively impact the entire Italian entrepreneurial and industrial ecosystem, directly and indirectly acting responsibly as a connector in the network of stakeholders.

This study reveals that sustainability is a common path across a range of actors. Accordingly, the BIs investigated develop, together with their incubatees, different paths that lead to achieving sustainable goals, as this interviewee explained:

Our incubator has an eye on the ESG world. We offer a whole program of acceleration that is verticalized in this area. Thanks to it, and not only, our portfolio has several participations in start-ups whose work is focused on sustainability.

In addition, the vast network developed by each incubator enables businesses to contact the stakeholders (partners and professionals) best suited to achieving sustainability goals or having what they need to move in the direction of sustainability. The following comment illustrates this point:

We believe it is beneficial to facilitate partnerships with other organizations that promote sustainability because this can help start-ups integrate themselves into larger networks, where they can share ideas, resources, and best practices with other organizations engaged in sustainability.

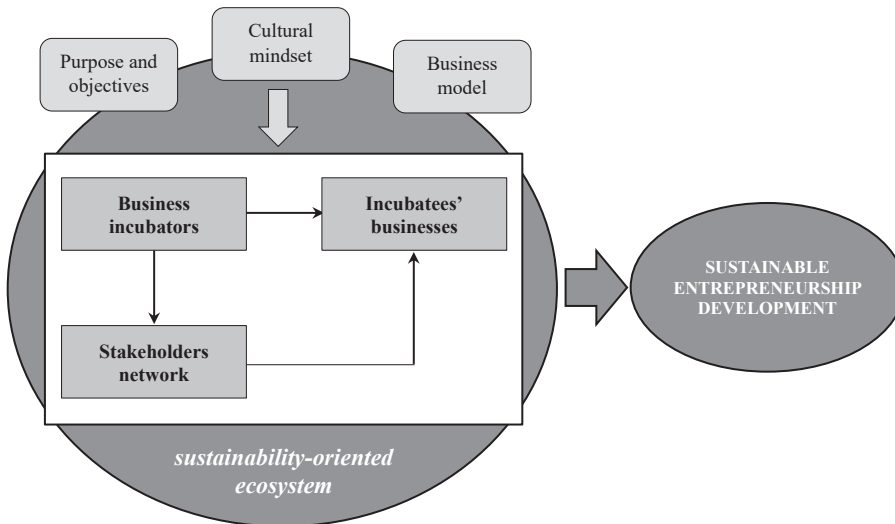
In brief, the partnerships developed between these actors facilitate the creation of a sustainability-oriented ecosystem, which can support sustainable entrepreneurship development through these interactions and the (human, technological, economic and financial) resources adopted. These actors' long-term participation and commitment to a sustainability-oriented approach promote the development of sustainable entrepreneurship.

4.5 A conceptual model of business incubators as a driver of sustainable entrepreneurship development

The results of this analysis highlight that the non-born-sustainable BIs are organizations able to support entrepreneurs who aim not only to enhance their business competitiveness but also to produce a positive, sustainable impact. BIs can move in this direction by networking between themselves, their incubated businesses and stakeholders.

Finally, a grounded theoretical model is proposed based on the data structure, as depicted in [Figure 2](#). The arrows in the model represent the relationships between the emergent concepts (i.e. purpose and objectives, cultural mindset and business model), the actors within the ecosystem and the phenomenon under investigation (i.e. the role of BIs as a driver of sustainable entrepreneurship development).

Although the purpose, cultural mindset and business model are distinguished within [Figure 2](#), they must be integrated and established internally in each BI, incubated business and their stakeholders to develop sustainable entrepreneurship. It is not enough that these elements



Source(s): Authors' own work

Figure 2. Conceptual model of business incubators as drivers of sustainable entrepreneurship development

are created within a single one of these actors because the services provided (e.g. training, consulting, mentorship, networking and financial support) will not enable them to create a positive impact to achieve sustainability goals. If all these conditions coexist, the partnerships between and among these actors can generate a sustainability-oriented ecosystem that is aimed at sustainable entrepreneurship development.

5. Discussion

Faced with a situation where the relationship between BIs and sustainability has not been widely investigated in the existing literature, the research results have shown that non-born-sustainable incubators can take a decisive role in developing sustainable entrepreneurship. In other words, the gap between born-sustainable and non-born-sustainable BIs is no longer as clear as has been shown by previous studies (e.g. Fichter and Hurrelmann, 2021) because the support offered to start-ups by BIs is often focused on sustainability as a perspective of the long-term growth of new businesses.

Considering the conceptual distinction proposed in the literature (e.g. Bruneel *et al.*, 2012), the non-born-sustainable BIs examined do not belong to the first-generation BIs, given that they offer more than space and other facilities to young businesses to reduce costs. They mainly fit into the second-generation of BIs, which support their incubatees in logistics management, financing of new ideas and businesses, and the drafting of business plans and marketing campaigns. Only a few of the BIs interviewed belong to the third generation of BIs, which aim to help their incubatees to develop innovative technological projects in addition to gaining access to new markets.

In observing the purpose of the BIs analyzed here, a dual situation emerges. On the one hand, some BIs have focused their objectives on the traditional role of promoting innovation and economic growth (Deyanova *et al.*, 2022). On the other hand, other BIs explicitly place the notions of sustainability and innovation side by side (e.g. Boons and Lüdeke-Freund, 2013) and aim to promote solutions for the economic, social and environmental problems of interest to their incubatees. In other words, the role of promoting sustainable entrepreneurship in start-ups is connected to both born-sustainable incubators, as previously demonstrated (e.g. Battisti,

2019; Casasnovas and Bruno, 2013; Pandey *et al.*, 2017; Sonne, 2012), and non-born-sustainable incubators, as this study highlights.

The findings make it clear that corporate culture is essential to developing sustainable entrepreneurship, and that BIs foster the growth of an ecosystem where start-ups can cultivate their understanding of their development path, skills and behaviors oriented toward sustainability. The role played by BIs in this ecosystem is of particular significance also when referring to the funding gap often faced by sustainability-oriented start-ups. In this respect, the availability of sources of finance should be seen through the lens of overlaps instead of gaps, thus permitting firms to consider different funding scenarios (Haider Alvi and Ulrich, 2023), and BIs should be considered in their own right as “impact-oriented support organizations” (Roundy, 2020, p. 476).

Even though BIs adopt different specific tools – for example, related to strategy, accountability, intellectual property or technology transfer – a common element emerged: sustainability is an essential part of incubating a contemporary start-up. While previous studies focused on the evolution of BI models by underlining new services provided to incubatees (e.g. Bruneel *et al.*, 2012; Grimaldi and Grandi, 2005; Tang *et al.*, 2019) and proposing a four-step pattern, this analysis identifies a cultural dimension that is required for the evolution of these models. In other words, non-born-sustainable BIs do not offer new services as opposed to the established ones. However, they concentrate on transforming the cultural mindset in which start-ups grow. In this regard, the role of BIs is focused on the promotion of intellectual capital, as mentioned by previous studies (e.g. Calza *et al.*, 2014), by pervading all the dimensions of intellectual capital (Hongli and Lingfang, 2011) with a sustainability orientation.

The findings outline that the value proposition of BIs includes new elements related to sustainability, thus broadening the development opportunities for incubatees. From this perspective, the findings are in line with previous studies showing that the evolution of a BI’s business model is related to the new support needs of start-ups (and start-uppers) at different stages of their growth path (e.g. Bruneel *et al.*, 2012; Mrkajic, 2017). From the perspective of business model evolution, sustainability becomes an essential element to face the challenges of current markets, so BIs include it in their value proposition and practices to avoid market failures and create a competitive advantage for start-ups (von Zedtwitz, 2003).

6. Conclusions

Using a qualitative research method, this study has shown that non-born-sustainable BIs support the development of both entrepreneurship and sustainable entrepreneurship. More specifically, they support the development of entrepreneurship in their incubatees in terms of innovation and competitiveness by sharing and transferring knowledge and providing services aimed at solving problems causing market failures. Additionally, non-born-sustainable BIs have the potential to promote sustainable entrepreneurship and facilitate the creation of a sustainability-oriented ecosystem using various specific tools. In this context, BIs help start-ups develop a purpose, cultural mindset, and business models that enable them to face the challenges of today’s competitive environment, in which sustainability has become (and will increasingly be) an essential requirement for companies. To move in this direction, this research revealed that a sustainability-oriented corporate culture must be established in BIs and across their incubatees’ companies, and awareness of acting together must be developed to achieve sustainability goals.

The previous literature (e.g. Hausberg and Korreck, 2020) has underlined the role of BIs in promoting the development of new businesses, and social and environmental impacts were seen as consequential to economic growth. This study highlights how BIs directly encourage the integration of the non-economic dimensions of sustainability into the development of start-ups. Furthermore, the sustainable dimension of entrepreneurship is not only linked to born-sustainable BIs but is an essential feature of all BIs.

This study contributes to the literature by pointing out the active role of non-born-sustainable BIs in promoting sustainable entrepreneurship development; to practice by emphasizing the importance of incorporating sustainability in corporate activities; and to policy by highlighting the role of BIs in supporting public commitment to sustainable development.

6.1 Implications for research

From a theoretical point of view, this exploratory study has some original implications. First, the findings highlight the importance of integrating the purpose, cultural mindset and business model within BIs and their incubatees to create ecosystems that favor the development of sustainable entrepreneurship.

Second, the findings enrich those of [Tiba et al. \(2020\)](#), who identified the primary role of start-ups in promoting sustainable entrepreneurship within their ecosystems. In contrast, this study highlights the leading role of BIs, rather than single start-ups, in promoting a sustainability-oriented ecosystem while fostering connections and networking between incubators, their incubatees and stakeholders. In this regard, several interviewees emphasized their relationship with other entrepreneurs and the start-uppers. The human element seems to emerge as a critical factor for BIs in choosing which entrepreneurial ideas to support and incubate. It can be argued that, on the one hand, BIs foster the transfer of a sustainability mindset to start-uppers, and on the other, innovative and strongly sustainability-oriented start-uppers might increase BIs' sensitivity to sustainability as well.

Third, even if BIs are not born sustainable, they do include sustainability in their mission. This leads to the question of whether a new generation of BIs is emerging besides the three generations of BIs already identified in the literature ([Bruneel et al., 2012](#)). This fourth-generation could include those BIs that support their incubatees to develop innovative technological projects that have positive, sustainable implications for the environment and society. As such, this generation of BIs does not differentiate itself from the previous ones in terms of additional services offered to incubated businesses, but rather in terms of the different cultural mindset that shapes the way the BI supports the development of start-ups.

6.2 Implications for practice

In terms of practical implications, the results of this study suggest that BIs should explicitly address sustainability in their purpose and in the presentation of the services they offer (e.g. sustainability reporting), even if they were not born with this specific aim at the core of their mission and vision. This could help better position their offerings and could help attract start-uppers with a similar cultural mindset.

Second, since sustainability has become an essential element in today's competitive environment, BIs should define a framework of operations and practices that can boost innovativeness, while having a positive impact on the community and on the environment.

Finally, sustainability is sometimes still regarded as a cost. For a nascent firm, the costs of sustainability and the difficulties in access to capital might discourage a start-up from adopting a sustainable approach to its business from the beginning. By facilitating access to knowledge, resources, and capital, BIs could help start-ups overcome these difficulties and encourage them to adopt practices aimed at sustainability.

6.3 Implications for policy

The findings of this research also have social implications. Given that the contribution of firms to sustainable development is linked to the growth of sustainable entrepreneurship, BIs can be viewed as drivers of social change. BIs could be sustained through public assistance and the help of well-established firms to promote the spread of sustainable entrepreneurship culture and the success of sustainability-oriented start-ups.

Furthermore, this study contributes to policy by suggesting that the traditional role of BIs as drivers of economic growth, as demonstrated in the early stages of their development (e.g. Merrifield, 1987), can be transformed into a broader view of BIs as drivers of sustainable development in line with the SDGs. To promote this new role, public authorities could favor different types of BIs by financing them, but also by introducing facilitatory legislation and fiscal incentives.

6.4 Limitations and future research directions

Some limitations of this study should be acknowledged and further research directions suggested to reinforce the findings. First, this study focuses on BIs, neglecting start-ups that are supported in their development by BIs, as well as, more generally, the perspectives of multiple stakeholders. Future research could thus adopt a multi-stakeholder perspective – first, by analyzing start-up perspectives to understand their views on the function of BIs in promoting sustainable entrepreneurship and to underline the roles that BIs can play in developing sustainability-oriented start-ups. In addition, the research could invoke multi-stakeholder analysis by identifying and interviewing associations, organizations, and other firms that support BIs' activities in developing a sustainability-oriented ecosystem. Therefore, further research could focus more deeply on the multiple factors that affect cultural mindset and strengthen the capacity of BIs in developing sustainable entrepreneurship and sustainable practices in start-ups.

Second, the BIs selected for the empirical research are all in Italy. It would be interesting to expand the sample to other countries where sustainable entrepreneurship shows different degrees of development – for example, by implementing transnational comparative research. In this line, further research could also explore the impact of social, legal and cultural contexts on the development of different sustainable entrepreneurship ecosystems, and conversely, the effect of BIs on different local/regional entrepreneurial environments, as suggested by previous studies (Leitão *et al.*, 2022).

Third, from the methodological point of view, a restricted number of managers were interviewed, limiting the representativeness of the outcomes, and only one person was interviewed from each BI, thus providing a subjective vision of the phenomenon under investigation. Future research could overcome these limitations by gathering a larger sample of respondents (managers and other employees) from each BI, as well as connected incubatees/stakeholders. Using multiple observers as data sources, namely investigator triangulation (Jack and Raturi, 2006), single-source bias will be overcome, and the validity of results will increase.

Finally, this study used a qualitative method, and accordingly, the results of the interviews cannot be generalized. It would be interesting to adopt a quantitative method to design a model to predict BI and start-up sustainability behavior. With this regard, variables such as start-uppers' personal value orientation or the start-up business industry could be considered to explain sustainable entrepreneurship development.

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Appendix

Questionnaire administered to business incubators for this study

Role of the person completing the questionnaire within the business incubator.

Property of the business incubator.

- (1) public: central administration
- (2) public: local government
- (3) public: university
- (4) private: financial business
- (5) private: non-financial business
- (6) nonprofit
- (7) a mix of the previous cases
- (8) other (if yes, please specify).

Activities of the business incubator.

- (1) managerial accompaniment (if yes, please specify this activity)
- (2) access to physical workspaces, laboratories, computer equipment and business development support services
- (3) entrepreneurial and managerial training (if yes, please specify this activity)
- (4) development of relationships
- (5) search for funding with an introduction to good practice of dialogue with investors and partners
- (6) assistance with administrative, legal and intellectual property-management services
- (7) advice (if yes, please specify this activity)
- (8) other (if yes, please specify this activity).

Who do you mainly target?

- (1) companies
- (2) start-ups
- (3) professionals
- (4) other (please specify).

Do incubatees need to meet specific characteristics to be part of the incubation process? If so, what?

Do your incubatees include companies/start-ups that are sustainability oriented? If so, how do you meet their demands?

What is your main purpose?

- (1) to develop new ideas and grow
- (2) to support local economic development
- (3) to accelerate the process of transforming an idea into a real business that is able to generate profit
- (4) to help start-ups take off quickly and move forward
- (5) to provide support throughout the company's growth cycle
- (6) to help companies exit from the incubator once the company has achieved its goals
- (7) to be coworkers, where companies share spaces and resources without receiving specific assistance for the development of their activities
- (8) other (please specify).

Which of the following generations does your business incubator represent?

- (1) first-generation business incubators: we mainly offer spaces and allow young businesses to reduce costs related to secretarial services, rentals, light and telephones
- (2) second-generation business incubators: in addition to supporting logistics management (e.g. offices), we intervene directly in the financing of new ideas and businesses and offer advice in the drafting of business plans and free marketing campaigns or limited costs
- (3) third-generation business incubators: we help entrepreneurs and enterprises access new markets and develop the customer base; we are mainly oriented to the development of innovative technological projects
- (4) fourth-generation business incubators (please specify).

Why should a business turn into a business incubator?

- (1) to reduce or reset part of the organizational costs for some months
- (2) to provide direct funding or facilitate access to state and European public funds
- (3) to facilitate entry into a network that integrates knowledge and capital by opening doors to contacts and relationships that companies would take several months to access alone
- (4) other (please specify).

In your opinion, what are the advantages of using a business incubator?

- (1) to access capital from investors or lenders
- (2) to create and use networking opportunities with potential partners
- (3) to be guided on legal issues
- (4) to access office space at discounted prices
- (5) to be part of a consolidated network that can give more credibility to early-stage businesses when seeking funding or partnerships with larger organizations
- (6) to access resources (e.g. mentorships) that can help entrepreneurs avoid the most common mistakes that are made when starting a business
- (7) other (please specify).

Thank you for your collaboration.

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