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The Incubator Effect: How Incubation Centers' Challenges Can Disadvantage Women Entrepreneurs

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Abstract

Purpose: Incubation centers are often touted as catalyst for entrepreneurial growth, yet women entrepreneurs frequently encounter unique challenges within these spaces. The purpose of this paper is to identify the challenges that business incubators are facing which is becoming a hindrance in the growth of women entrepreneurs.

Design/methodology/approach: This study has used the qualitative method by reviewing the previousre search that has been done and also by reviewing the reports of different organizations.

Findings: The findings reveal that major challenges that incubation centers are facing are financial sustainability, lack of skilled professionals and access to advance technologies that impacts the women entrepreneurs by reducing guidance, increasing burden, increasing their financial strain and limited exposure.

Research limitations: This research primarily relies on the existing literature that has been available. It covers the general perspective, but the result can differ for different and specific situations.

Practical implications: The findings of this research have crucial practical implications for incubation centers operators, investors, policy makers and government. By addressing the identified challenges through initiatives like sustainable funding model, Gender-sensitivetraining for incubator staff and Technology Equity Programs government and investors can support them which will help role in empowering women entrepreneurs which will help in the growth of the nation.

Keywords: Women Entrepreneurs, Business Incubation Centers, Financial Sustainability, Challenges, Innovation.

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Introduction

There is no denying that entrepreneurship has a transformative effect, propelling social progress, economic growth, and innovation. By generating jobs, advancing technology, and meeting consumer demands, entrepreneurs contribute significantly to the prosperity of their countries (Stoica et al., 2020; Acs et al., 2018).Nearly half of all jobs worldwide are held by small and medium-sized firms (SMEs), which account for over 90% of all businesses globallyand are vital to economic stabilization (World Bank, 2020). These entrepreneurial endeavors are especially crucial for reducing poverty and strengthening marginalized people in developing nations (Si et al., 2019; Bruton et al., 2013). However, inclusion is essential to maximizing the potential of entrepreneurship, especially in expanding the roles of women who have historically faced systemic barriers. Women entrepreneurs are revolutionizing the global economy by using innovation to create jobs, empower communities, and progress society. They currently make up 37% of global entrepreneurs, up from 27% in 2014, despite ongoing obstacles such gender bias and a lack of funding (GEM, 2022). In addition to focusing on profitability, their companies address pressing issues in sustainability, healthcare, and education (Brush & Cooper, 2012). For example, in South Africa, up to 90% of wages are reinvested in the family and community, resulting in a general uplift of society (Makandwa et al., 2022). They are crucial toaccomplishing the UN's SDGs, particularly gender equality and poverty reduction (United Nations, 2023), since they eliminate disparities and foster inclusive growth by hiring other women

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and supporting gender-equitable policies (Jennings & Brush, 2013).Beyond the short- term financial gains, women's entrepreneurship has a significant impact. Businesses run by women are 1.5 times more likely to adopt sustainable practices, according to studies (Kimuli et al., 2022; Stefan et al., 2021). Organizations such as SEWA have empowered millions of people in India by show casing the transformative power of cooperative models (Datta & Gailey, 2012).

Incubation centers have emerged as crucial entrepreneurship facilitators to address the gender gap and boost business development. These initiatives, which offer financial support, technical help, and mentorship, increase company survival rates by 50% (Hackett & Dilts, 2004). Incubators are becoming more and more significant as essential components of national innovation systems that promote economic growth (Freeman, 1982; Nelson, 1993; Intarakumnerd et al., 2002; Carlsson et al., 2002). In particular, they target particular issues and serve as equalizers for female entrepreneurs. For instance, incubators are used by the ILO's Women's Entrepreneurship Development Programme to provide essential financial education and investor linkages (ILO, 2017). However, despite their proven capabilities, little is known about the internal operations and complexities of these incubation ecosystems, especially with regard to how they impact female entrepreneurs. Moreover, little scholarly attention has been paid to the issue of identifying the challenges faced by business incubators from within their ecosystem (Lose et al., 2020). This lack of understanding is crucial, as any systematic prejudices or operational inefficiencies within an incubator could possibly have a negative impact on women, becoming a roadblock in their ability to leverage their resources effectively. Hence, the aim of this study is to explore how these complexities at incubation facilities may unfairly prove to be a disadvantage to women entrepreneurs, which might impact their ability to progress in the business world.

Literature Review

Business In cubation Centres

Incubation centers have proven to be a catalyst for entrepreneurial progress by providing crucial inputs and facilities like infrastructure, networking, mentorship, and other necessary resources to shorten the gap between scientific research and commercialization (Akpoviroro et al., 2021). Hence, this supporting ecosystem fosters innovation, management of costs, enhances quality, and cultivates a spirit of creativity (Ravichandran and Dixit, 2024; Kaggwa et al., 2024). The first private incubator came into existence in New York in 1959 (Lewis, 2001). In contrast, the first public incubator opened in Philadelphia in 1964 (Campbell & Allen, 1987). The incubation center process provides a structured pathway for technology-driven start-ups. It begins with the entrepreneur's entry into the incubator, progresses through the development of the company's product and organizational structure, and culminates in the company exit, ready to compete and thrive in the open market (Abraham, 2017; Bergek and Norrman, 2008). Incubators serve different purposes, categorized as mixed-use, technology, and economic development. Mixed-use incubators drive continuous regional industrial and economic growth through broad business development support. Economic development incubators address development disparities by fostering industrial restructuring and creating jobs (Aernoudt, 2004). Business incubators are seen by researchers as key institutions for fostering start-up success. They provide targeted services and support, focusing on knowledge agglomeration, resource sharing, innovation, and competitiveness to help start-ups navigate the challenges of entrepreneurship and achieve rapid growth and financial stability (Masutha and Rogerson, 2014; Levakova, 2012). For aspiring entrepreneurs fresh out of B-school, incubators within academic institutions are invaluable. These centers empower graduates by offering training, workshops, laboratory facilities, and coaching on a wide range of entrepreneurial challenges. This nurturing environment fosters creativity, cultivates innovations, and accelerates the growth of their ventures by providing access to finance, valuable networking opportunities, collaborative workspaces, and mentorship programs (Dixit et al., 2024; Ayatse et al., 2017). Grimaldi & Grandi (2005) divide incubation centers into five categories: business innovation centers, technology incubators, corporate private incubators, university business incubators, and independent private incubators. Meanwhile, Von and Grimaldi (2006) distinguish incubation between university, economic business, independent, company internal, and virtual incubators. Research has shown the positive impact of incubation centers on empowering women entrepreneurs. The facilities these centers provide enable them to become leaders in innovation, driving economic growth and challenging traditional gender roles. This contributes significantly to the advancement of gender equality in India (Gupta et al.,

2021). For instance, Atal Incubation Centres (AICs) are instrumental in empowering women entrepreneurs by offering tailored programs such as (WEDP, AWEspiring etc.), actively increasing female participation in start-ups and addressing the unique challenges women face (Prakash et al., 2024).

Challenges faced by Women Entrepreneurs

Women entrepreneurs, despite their growing presence, success and magnificent contribution to society in all aspects, continue to face a unique set of challenges that can hinder their progress. These challenges of tenstem from a combination of societal expectations, systemic biases, and practical limitations (Hasan et al., 2016; Kamberidou, 2020; Afshan et al., 2021; Rahman et al., 2023; Emon et al., 2024). Hisrich& Brush (1984), highlights that limited access to finance,credit, and business training creates a significant hurdle for female entrepreneurs, often confirming their businesses to a small scale and hindering growth potential. The study by Panda (2018) assesses and rates the hurdles that women entrepreneurs in developingnations. It outlines seven major obstacles. It highlights that women entrepreneurs confront more intensehurdles, which are made worse by the unfavourable circumstances existing in emerging nations. Another study by Rakesh (2007), evaluates the difficulties and areas for growth related to women'sentrepreneurship in small to medium-sized businesses(SMEs),notablyin Addis Abeba, the capital ofEthiopia. The research found that the primary problems which were faced bywomen entrepreneurs arerelated to obtaining funding to start and operate the SMEs. Halkias etal. (2011) examined the profile of67 women entrepreneurs in three different parts of Nigeria to find out the difficulties they face related tosocial and economic. The study reveals that microfinance and family dynamics play a crucial part indeveloping and influencing the rise of business among women in Nigeria. Through the use of secondarydata in studies, Kumbhar (2013) explored several concerns related to the difficulties faced by women entrepreneurs in rural India. The main obstacles to women's entrepreneurship development in Indiaincluded a lack of mobility, hurdles, and contact with successful businesspeople.

Role of Incubation centres in fostering Women Entrepreneurship:

The growing use of incubation to foster entrepreneurship and start-ups has spurred new policy incentives (Aernoudt, 2004; Kaggwa et al., 2024). While business incubators have significant variation in their structure, support services, and operational procedure, Theodoraki et al. (2018) emphasize that they all share a common purpose: to promote entrepreneurship, stimulate innovation, support the establishment of new ventures, and contribute to economic development. They are key elements of a sustainable entrepreneurial ecosystem (Klofsten et al., 2016; Spigel, 2017). French women's business incubators significantly contribute to women's entrepreneurship and empower them by fostering role models, building confidence, and cultivating a sense of belonging among them (Gabarret et al., 2021). Hendratmi et al. (2018) highlight that government support plays a role; incubator organizations have a more significant positive impact on the success behaviors of women entrepreneurs in Indonesia. It has also been suggested that 360-degree government support and effective communication are needed to maximize its impact. Lorane-Lemaire et al. (2023) have emphasized that women entrepreneurs with in-hand experience and higher education levels derive the greatest benefits from virtual incubators, irrespective of the specific context.

Discussion

Business incubators serve as valuable foundation for entrepreneurs, providing access tonecessary resources such as infrastructure, networking, mentoring, capital support, and training programs, all of which are crucial for promoting development of entrepreneurship and the success of new ventures (Li et al., 2020). The hand-holding supportwhich these incubators giveto promote entrepreneurship has been researched by many authors as shown in Table 1. For example, Nicholls-Nixon et al. (2022) elaborated how these centres facilitate networking to investors, and the funding opportunities to entrepreneurs which is important in their growth. Theyhelp entrepreneurs in procuring funding through various channels, which is crucial for scaling operations and entering into the competitive world (Aldammagh et al., 2020). Entrepreneurs gets hands on valuable mentorship from experienced professionals and industry experts, who help them navigate the difficulties of business management. This support by these experts to newentrepreneursthrough these incubators coverscritical areas likemarket strategies, better financial management, and operational efficiency, enabling them to transform unique and innovative ideas into successful business (Busch et al., 2020; Awonuga et al., 2024). These incubation centres also help in building a collaborative ecosystem where entrepreneurs,investors, and other discipline experts connect and gain from

one another. There networking promotes valuable connections, helpingstart-ups to share experiences, gain insights from both success and failures, also finding new opportunities for partnerships and other funding (Van, 2020; Victoria et al., 2024). They also give comprehensive training manuals and programs covering necessary business skills, from planning, marketing and financial management to product development,business management, andregulatory compliance. Instead of the regular assessment and evaluation further refine business strategies and improve service delivery, equipping entrepreneurs to refrain from the common pitfalls and succeed (Mavuri et al., 2023; Meleetal.,2024).Theyalsoactasalaunchingplatformforstart-upsbasedonuniversity research, offering access to resources and guidance to bringinnovative ideas to market (Lalkaka, 2002; Lala and Sinha, 2019). Start-upsat incubation centres benefits from reduced operational costs due to the accessibility of affordable physical resources like co-working spaces, sharedlabs, and essentials equipments. A biotech start-up, for example, conducts a research in shared lab, reducing substantiallythe financial burden of setting up its own (Wang et al., 2020; M et al., 2022).

Apart from their various positive contributions in fostering entrepreneurship, incubation centers face numerous obstacles that require careful assessment. As stated by James et al. (2017), limited marketing resources, including insufficient funds for promotional activities and a lack of a dedicated marketing team, were the main roadblocks faced by incubation centers

Table 1: Support given by Incubation Centres

S. No.	*Support given by Incubation Centres*	*Authors*
1.	Financial Support	Nicholls-Nixon, 2022; Aldammaghetal., 2020
2.	Guidance and Mentorship Support	Awonugaetal., 2024; Buschetal., 2020
3.	Networking Opportunities	Victoriaetal., 2024; Van Rijnsoever, 2020
4.	Enhancing the skills	Meleetal., 2024; Mavurietal., 2023
5.	Supportin genvironment of innovation	Lala & Sinha, 2019; Lalkaka, 2002
6.	Physical Infrastructure Support	Metal., 2022; Wangetal., 2020

in South Africa. Meanwhile, Shillie & Wokwen (2024) and Lose et al. (2015) identified a lack of grants and funds, inadequate tenant space, advanced technological facilities, and opportunities for expansion into new markets as challenges for South African business incubators. In the case of Oman, Al-Baimani et al. (2021) and Sanyal et al. (2018) have shown that ethnographic differences and the government's complex regulations pose problems for institutional incubation centers. In the Philippines, the issues hindering the development of technology business incubators were a dearth of adequate funding, complex IP policies, and a slow procurement process (Esponilla, 2019). Resource limitations negatively impact business incubators in Pakistan. These limitations include limited access to advanced ICT facilities, inadequate production space, and a lack of both sponsorship and adequate funding, which ultimately negatively impact their ability to scale their operations (Mahmood et al., 2017). Furthermore, a deep analysis of the existing literature has highlighted how specific constraints within incubators widen the gap for women entrepreneurs, exacerbating their disadvantages. These are as follows:

Financial Sustainability

Effective incubator management is demonstrated by its capacity to secure funding, attract sponsors, and mobilize resources for the benefit of its programs and participants (Scaramuzzi, 2002). Public business incubators operate as non-profits; therefore, their funding usually comes from government grants and standard fees paid by the businesses they incubate (Grimaldi and Grandi, 2005). While public business incubators often benefit from government funding, private business incubators generally depend on their own finances and private sponsorships (Lalkaka, 1999). This funding model can lead to instability, particularly if funding is inconsistent or if government policies or donor priorities shift. For example, funding cuts or withdrawal can force some centers to struggle, impacting their ability to support start-ups. This will also lead to insignificant operational expenses related to staffing, facilities, and the development of their programs. This financial instability in incubation centers can create a range of obstacles for women entrepreneurs. When these centers face financial difficulties, they may have to cut back on essential resources like funding, mentorship programs, workshops, and networking opportunities, which will limit their resources, increase their uncertainty, and potentially widen the gender gap in entrepreneurship.

Lack of skilled professionals

The success of a business incubator hinges on attracting and hiring qualified professionals to manage its operations (Cullen et al., 2014). Productive and continuously growing human resources are invaluable to any organization. Therefore, incubator managers must foster creativity and innovation within the business incubation function (Nieuwenhuizen, 2009). They often underperform because their coordinating members may lack sufficient managerial and financial skills, as well as an entrepreneurial background, which collectively hinders their ability to effectively manage the incubators and support the enterprises (Grimaldi and Grandi, 2005). Women entrepreneurs often thrive with mentors and supporting staff at incubation centers who understand their unique challenges, like gender bias, work-life balance, and funding access. However, if incubation centers lack professionals with this specialized knowledge, it can deprive them of crucial guidance. This shortage of skilled professionals creates a less supportive and equitable environment, limiting entrepreneurial chances of success.

Accessto advanced technological facilities

Advanced technological facilities are crucial for incubation centres to effectively support start-ups, providing them with essential resources like high-performance computing, specialized software, andlaboratory equipment (Adelowo Caleb et al., 2012). Without access to necessary technology like high-performance computing, specialized software, or lab equipment, women entrepreneurs may be unable to develop and test their innovative ideas, hindering their ability to bring new products and services to market.

Findingsand Conclusion

The present research reveals that although incubation centres provide essential support systems for start-ups, including physical infrastructure, training, mentorship, networking, and financial capital access, they are hampered by internal structural issues that disproportionately affect women entrepreneurs. These obstacles, which include financial sustainability, inadequacy ofstaff and technological gaps, create a glass ceiling for women entrepreneurs that prohibit them from accessing the resources needed to scale their innovations. To address these issues three critical interventions are recommended by the researcher and that are:

Sustainable Funding Model

Investors and governments should support incubators based on the revenue, employment creation, and successful launch rates of women-led businesses. Thorough monitoring of these metrics will give statistics for campaigns, encourage incubators, and highlight the importance of gender-responsive support. Another option is to use social impact bonds, which link investment to particular social outcomes for women entrepreneurs (Kaggwa et al., 2024).

Gender-sensitive training for incubator staff

Establishing a fair and encouraging environment for women entrepreneurs requires that incubator employees get gender- sensitive training. It entails actively tackling the structural biases and particular difficulties that women have in the business sector, going beyond merely recognizing gender inequalities (Nanjala et al., 2023).

Technology Equity Programs

In order to ensure that women entrepreneurs in STEM professions can prototype and commercialize products, incubators should collaborate with tech companies and academic institutions from other countries as well to offer subsidized access to cutting-edge facilities (Becker et al., 2006).

Developing a more successful and inclusive incubation ecosystem requires addressing these issues. To evaluate the effectiveness of these interventions and improve policy for scalable impact, future research should concentrate on longitudinal studies. In order to establish a more encouraging and welcoming atmosphere for women-led enterprises, incubator operators, investors, policymakers, and governments will need to work together.

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